Bknightlines

The Earth Issue

Alumnus Milan Bull's quest to save endangered birds, and other environmental milestones at UB



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President's Line



Neil Albert Salonen

After a challenging New England winter, spring has finally made an appearance. Not only sunshine, but increased activity is noticeable everywhere on campus. Our enrollment growth and new program development continue, and over the past ten years, new faces have appeared among UB's teachers and learners. The University's financial position is strong as a result of choices made in alignment with the Strategic Plan.

This year our theme might be called "green growth." Currently, the University is "powering up" a 1.4 megawatt fuel cell power plant that will generate enough electricity to meet most of the campus needs. This simultaneously reduces the University's carbon footprint, saves money that can be directed toward supporting students, and provides the University energy independence in periods of local or regional power failure. In addition, the University has been granted \$2.2 million from the Department of Energy and Environmental Protection to install a microgrid that will enhance the resiliency of the electrical grid and ensure maximally effective power usage. A commitment to "greening" campus operations is part of our strategic plan, and these initiatives represent steps in this direction.

The country has for some time been discussing the cost of higher education. The University has been addressing this issue, aiming to serve the students we enroll and to ensure a sustainable future for the institution. We are in the midst of comprehensively examining the University's recognition of prior learning credit for students. This entails everything from granting credit for work experience to ensuring that transfer policies are fair and well published. If students can document learning, the University is prepared to recognize it, thereby helping to control the cost of their education. This approach also ensures that students focus on material that is new and fresh. As the following articles show, our students are eager to take advantage of opportunities to grow and develop.

Another significant development is UB's Global Learning Initiative. This approach to online learning commits the University to providing access to students who otherwise could not further their education. The online student might be a parent completing her or his college education while balancing a job and family life. Others are mid-level executives who desire to serve at higher levels of responsibility that require additional education. Online learning opens opportunities for students that are fully consistent with what is offered in "brick-and-mortar" classes. The admissions standards and learning outcomes are the same, even though the instructional resources are different. The online students who enroll at UB are "our students," and those who graduate will be "our alumni."

The growth of spring comes naturally; the growth of life on campus, however, reflects a commitment and plan. The full UB constituency is involved in creating the plan and making the commitment. As we do so, I encourage you to continue making a difference at UB. Look for an opportunity to join us at a campus event—or give to a project that reflects commitments you share.

Neil Albert Salonen President

UBKnightlines

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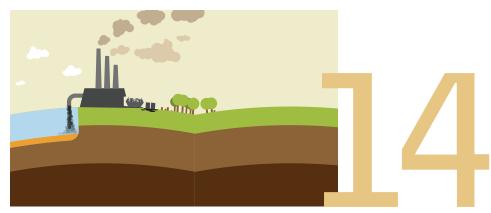
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Please be sure to include your full name, contact information, and UB class year (if applicable). Letters may be edited for length, clarity, style, or accuracy.

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Editor's Note

A few years ago, the University created a Seed Money Grant program to help faculty grow early stage research into viable projects that would then be eligible for additional funding from external sources. I can't help thinking about these grants now that spring finally feels within reach. By the time this issue reaches you, UB's gardens will have started filling with flowers that were planted months ago by crews who meticulously turned the earth, dug bulbs, then let time and nature's work do the rest.

More often than not, achievements are the result of behind-the-scenes work, incremental advances, occasional setbacks, and patience. That's true whether we're celebrating spring's first flowers or finding solutions to pressing problems. Fittingly, this issue of *Knightlines* celebrates members of our UB community who are making an impact by addressing long-term environmental issues.

When alumnus Milan Bull graduated in 1984, for instance, many of Connecticut's birds were on the verge of extinction. Armed with a new biology degree from UB, Bull began lobbying lawmakers and raising public awareness about reversing that trend. Today, he reports the bald eagles, peregrine falcons, Cooper's hawks, and other species are back. That's not only good for the environment, it's good business. Birders currently spend \$41 billion nationally on their pastime. As you'll read in "Taking Flight" (page 4), Bull's invested his own brand of Seed Money to protect our feathered friends with priceless dividends for all.

Alumna Amelia Amon '82 is equally dedicated to a greener way of life. As an industrial design major at UB, she was required to take physics and science along with art and design. This training equipped her with the technical ability to create solar-powered ice cream carts for Ben & Jerry's and other solar-powered devices that are smart and visually stunning. By embracing aesthetics and technology, Amon's successfully convinced others to use sustainable energy. For more about her exciting career, see "The Bold and the Technical" on page 8.

On campus, Seed Money Grants currently support environmental research by faculty. Acupuncture Institute assistant clinical professor Steve Jackowicz began wondering how pollution and climate change affect medicinal plants. (See "Under Siege" on page 10.) While he's primarily focused on plant-based cures used in traditional Chinese medicine, the potential ramifications of his research are stunning when we remember that roughly half of all pharmaceutical compounds used to develop drugs in the last 30 years have relied on plant extracts or plant compounds.

The health of the earth and what's in our medicine cabinets is just one way we're connected to the natural world, but it isn't always easy to recognize these ties. For that we need great teachers. Alumna Rindy Higgins, the subject of the "Focus On" feature on page 30, and visiting assistant biology professor Amanda Petrus are two leaders in science education. "Science is about asking questions," says Higgins, who was awarded by the National Science Teachers Association for her pioneering work taking kids out of the classroom and into the woods. Adds Petrus in her stunning essay, "Nurturing the Scientific Imagination" (page 45), "As a teacher, I now have an obligation to let my students know that they can and must learn. Science belongs to them, too."

Leslie Geary Founding Editor, *Knightlines*

Losh Georg

Pipelines

Ovations for Welcome Back Weekend

Dear Editor,

As alumni, it was great for my brother and I to see everyone at Welcome Back Weekend in October. We had a blast touring every single building and taking the proverbial stroll down memory lane. Frank was up from North Carolina and purposely planned his visit to take part in the weekend. He graduated in 1954 and 1962 (MBA), so he has seen the many improvements made to the campus.

I live in Fairfield, so I try to visit on occasion to go to the bookstore and to take my own private little tours. UB has been good to our family, as four of our immediate members graduated from there.

You folks did a great job on the Welcome Back Weekend, and we hope to visit you again. Thanks so much.

Larry Santora '69, '81 Fairfield, CT

Dear Editor,

I want to thank the University for an awesome Welcome Back Weekend. Although I didn't make everything, the events I went to were off the charts! From breakfast and lunch at Marina Hall to the BSA reunion, alumni happy hour (hot wings and sliders—had a cold one!) and the cherry on top: voice play concert! What a day! Made me feel 21 again!

On Sunday, I attended church in Bridgeport and had breakfast in Marina. It was so good I passed up the food truck festival. Seeing old friends and new; fraternities and sororities on campus; student, faculty, family and alumni involvement in the ever-changing world and UB making a positive impact were very positive and highly uplifting, too! Thanks again. You did an outstanding job!

Harry Hollis '71
Jackson Heights, NY

Dear Editor,

I want to thank the Alumni Office for its time, effort, and planning for the nursing alumni brunch during Welcome Back Weekend. After talking with the office, I am more aware of the amount of work done and still needing to be addressed in reorganizing the alumni components for UB.

Best wishes for continued success. I look forward to seeing you at future events.

Tony Mascia '67 Newington, CT

Dear Editor,

Thomas Wolfe wrote, "You can't go home again." Well, I felt that I was home at the Campus Thunder luncheon and reunion during Welcome Back Weekend. How exciting it was to see everyone and exchange our stories with our fellow cast members and to meet and talk to cast members from other productions. I felt as if Mr. "D" were there, too, and he would have been so proud.

I want to thank the University Relations staff for working so many hours to make this event possible. Thank you also for collaborating with George Sepe and publishing the fabulous playbills from 1947-1964. This is something I will always treasure.

You made it possible for Mr. D to be acknowledged and recognized for all his contributions to Campus Thunder and the University of Bridgeport. Bravo! Bravo!

I wish everyone much success at Bridgeport, and, as they say in Show Biz: "Break a leg."

Joyce Kroin Kemp '63 Fair Lawn, NJ

An Alumnus's Tribute

Dear Editor,

Reading through the Fall 2014 issue of "Pipelines," I couldn't help but think fondly of my four years at UB, from 1965–1969, graduating cum laude with a B.S. in Business Education from the School of Education.

Professor Claire Garman arrived on campus sometime in the late 1960s to oversee the courses and supervise student-teachers in the Business Teaching program, which was rigorous and well-known throughout the Northeast. Unassuming, kind, considerate, and an excellent listener, he was instrumental to the success of this program and its students. Dr. Garman dedicated his heart to preparing aspiring business teachers to be able to successfully teach courses in typing, keyboarding, shorthand, transcription, office procedures and practices, marketing, business law and bookkeeping (later accounting).

After UB, I thoroughly enjoyed and successfully taught business courses in Fairfield, Connecticut, high schools for 17 years, becoming the district's coordinator of business education and then moving into the district office, where I directed the town's Adult/Continuing and Vocational Education programs. I also oversaw the very unique mentoring program, which matched elementary students with community volunteers. I was also an adjunct assistant professor at Sacred Heart University and Hillsborough Community College in Tampa, FL. My career in education in Fairfield spanned 30 years. I then began a second career in educational textbook and media publishing.

The strong and relevant education that I received at UB provided me with the foundation I needed in order to succeed in both public education and private industry. Hats off to Dr. Garman and UB!

Leonard Bennett, '69 Hollywood, FL

Alumnus Milan Bull's quest to save Connecticut's threatened birds from extinction is working, but he's not ready to declare a victory.

"There's a yellow-crowned night heron . . . and a willet off to its right," says Milan Bull '84, surveying the generous salt marshes at the mouth of the Housatonic River. He spots them straight away, with naked eyes. The birds are at least a 100 yards distant, and it takes his visitor, who fancies himself a birder, forever to locate the nondescript willett with the aid of eight-power magnification.

We leave the observation deck at the Connecticut Audubon Society's Coastal Center at Milford Point and meander across a spit of land toward Long Island Sound and a barrier beach, which is shared by many shore species, including homeowners with nests cheek by jowl like those of resident purple martins.

Here, on a fall afternoon, the birding is easy, almost wanton in its sensual display. Least and common gerns wheel above, chasing one another, while oystercatchers – black and white with long red bills – and both yellow- and black-crowned night herons stalk the mud flats. Great Egrets, white as snow, and reddish brown glossy ibises fly over a stolid semipalmated plover. The nests of endangered (and musical) piping plovers are protected by chicken wire enclosures, and, of course, an osprey hovers above it all.

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"Miley" Bull of the Connecticut Audubon Society has been watching the birds here for 60 years. He grew up right across the mouth of the river, on the Milford mainland, and he would tag along with his father on frigid mornings, fishing, crabbing, or duck hunting. Along the way, his father would point out the birds. They once spied an osprey, which circa 1960 was a rarity, and he told Miley to take a good look because it soon would be extinct.

"Nobody cared about the marshes back then," Bull recalls. "People would plant rows of evergreens so they couldn't see the mud flats from their houses. They didn't want anybody to know they lived near a swamp." The state certainly didn't care about marshes. In the late 1940s, Connecticut was planning to route Interstate 95 directly across Milford Point's wetlands, dissecting its lush habitats of mud flats, tidal pools, and grassy hummocks. But Milan Bull (the elder) and his fellow duck hunters did care. They rose up to complain and, remarkably, they prevailed: the highway migrated north, and a place teeming with birds and aquatic life was saved for their children and grandchildren.

(continued on page 6)





Miley Bull graduated from Milford Point and the local schools. His advisor suggested that the ticket to a desired career in wildlife management, given that jobs were scarce, was volunteering and networking. It was good advice: by graduation in 1972, his summer gigs had morphed into a fulltime position with Connecticut Audubon, where he has been ever since—most recently serving as its senior director of science and conservation.

In addition to his Bachelor of Science in wildlife management from UConn, he earned his master's in biology from the University of Bridgeport. He currently is a member of the Citizens Advisory Council to Connecticut's Department of Energy and Environmental Protection (DEEP), and was a founding director and past president of the Connecticut Ornithological Association. He and his wife, Cathy, reside in Fairfield and have two grown children.

Bull speaks warmly of his graduate experience, in a biology department that was chaired by the late Mike Somers and included Hugo James. "Having completed my undergraduate degree at a large state university, I was somewhat surprised by the genial, friendly team at UB, who made my transition to grad school seamless after ten years away from college life," he says. "Grad school at UB was without a doubt the most enjoyable and rewarding two years of my college career. I studied under Bob Singletary, and we dove on reefs off Bermuda looking at coral interactions, studied the heron rookeries on Chimon Island in Norwalk, and taught lab courses to wonderful students. My time at UB was rewarding both personally and professionally."

> Today, one of Bull's many duties is to write and solicit articles, organize, and edit the annual Connecticut: State of the Birds, a well researched, data-packed, yet eminently readable report

> > card on our

stewardship of the natural world (www.ctaudubon. org/state-of-the-birds/). How the birds go, so goes the environment. A can-do optimist, Bull says that progress is clear even while there is still much people can do to aid avian species.

"One of the biggest success stories is the overall return of our raptors since 1962—when Rachel Carson wrote Silent Spring and helped to get [harmful] pesticides banned," he says. "I remember as a kid looking in the Peterson Field Guide to the Birds and seeing the bald eagle and thinking, 'I wish I was around when they were here.' Now we have, what, 25 pairs nesting in the state. It's incredible! We have peregrine falcons nesting on bridge abutments in Milford, and other species that were rare—like red-shouldered hawks, Cooper's hawks and osprey—are now fairly common. The raptors have come back with a vengeance."

But not all species are thriving, and one of the purposes of the annual Connecticut Audubon bird report is to make politicians, conservation organizations, and the public aware of things that can and should be done, whether it's to limit the use of pesticides that deplete avian food sources, or to manage various habitats, like vanishing scrubland that is home to declining species in the state, such as blue-winged warblers, rufous-sided towhees, and yellow-breasted chats.

Even success stories are not unalloyed victories. For example, Connecticut's woodlands have returned in force during the past century and with them bird and animal species, like bears, turkeys, and moose. But not all woods are good places for even woodland birds to nest; fragmented forests can actually be an attractive nuisance to some species. "Wood thrushes are matureforest birds that are declining," Bull reports. "Studies have shown that they need nearly 500 contiguous acres of unbroken forest to increase their populations. When they nest in smaller tracts interspersed with houses and roads and even fields, they are more susceptible to

predation from raccoons or cats or having

their nests taken over by cowbirds."

Bull's optimism does not blind him to the challenges Connecticut birds—and its other species—face in a warming world where, just as an example, he has seen sea levels rise markedly at Milford Point in his lifetime. "In the past, when sea levels changed, salt marshes could migrate with the rising water," he says. "But there's no place for them to go today. We've hardened the whole shoreline. If the marshes get flooded they will disappear and with them all of the species we see out there today."

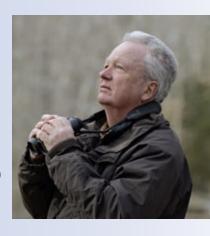
As remarkable and diverse as Connecticut's natural places, like Milford Point, remain given the density of human population and development, it is equally extraordinary that one of the nation's most affluent states spends less than half of one percent of its annual budget caring for its environment. Connecticut has historically been among the chintziest of all of the 50 states in this regard, and in the current budget each taxpayer is contributing a pittance, roughly \$10, to the DEEP. How this is possible with Connecticut's diverse outdoor community is anyone's guess: in addition to hunters and fishermen, three residents out of every ten report watching the birds here, according to one survey, and the Connecticut Audubon alone is 10,000-members strong and growing.

For example, the late Roger Tory Peterson, the Moses of modern birding, moved to Old Lyme, Connecticut because of its magnificent marshes and birdlife.

Among Bull's duties, if that is the right word to describe things he loves to do, is to lead groups on wildlife/birding safaris in state as well as to exotic locales, like Tanzania and the Galapagos Islands. He understands the context of Connecticut's ecosystems in a world that is slowly but relentlessly getting warmer, drier, and more crowded, where in many places not just bird populations but human ones are at the mercy of deteriorating environmental changes.

He remains guardedly optimistic: "We can solve our problems, but we have to start soon."

Don't Forget the Binoculars



UB and its environs are great viewing spots for bird enthusiasts.

Since UB is directly on the shore, a variety of water birds can be viewed simply by walking along the harbor to Seaside Park, says alumnus Milan Bull. Meanwhile, the campus itself offers "a hundred or more species" that harbor among its diverse habitats, from lawns to tall deciduous and coniferous trees, and landscaped shrubby areas.

For birders who wish to stretch their wings, an off-campus trip to the nearby McKinney National Wildlife Refuge in Stratford, or to Pleasure Beach on the other side of the harbor, also would be rewarding at any time of the year.

Here are some birds likely to be seen around UB:

Spring and Summer:

Water birds (anywhere along the campus shoreline)
Common Tern Black-bellied Plover

Least Tern Sanderling

Laughing Gull Double-crested Cormorant

Black-crowned Night-heron Raptors: Osprey
Great Blue Heron Red-tailed Hawk

Fall and Winter:

Lots of ducks can be spotted from the beach path from the harbor to

Bufflehead

Seaside Park)

Black Duck
Mallard

Long-tailed Duck
Red-breasted Merganser

American Wigeon

Greater Scaup

1

All Year: Gulls from Seaside Park

Greater Black-backed Gull Ring-billed Gull Herring Gull Alumna Amelia Amon '82 marries solar power with high-concept design to create for likes of the Smithsonian, Ben & Jerry's, and more.







the Beautiful

By Dianne Wildman

Not long ago, Amelia Amon sat down for a chat in a Union Square coffee shop a few blocks from her Manhattan apartment. Ordering a latte, she laughed and said she wasn't sure what time or even what day it was. Turns out she had just flown in from a three-week stay in Australia.

Time zones weren't much on her mind, though. Latitude, climate and sun hours were. "Did you know," she asked rhetorically, "that solar panels face north down there? But of course they would, since they face south here."

Most people don't stop to think that one through, but Amon considers the possibilities of solar no matter the hemisphere. A graduate of UB's industrial design program, she has carved a unique career specializing in solar-powered products, though she makes it clear that she cares passionately about all kinds of renewable energy solutions—especially those championed by the many colleagues and industry groups she's been integrally involved with in New York for the past 25 years.

So how did it all begin?

"I started out in furniture design, but one day heard about the idea of a solar ice cream cart." The memory made her smile. Warmly. All of Amelia Amon's smiles seemed to be warm. "First of all, everybody likes ice cream, and the challenge of powering a freezer by using the sun interested me."

So Amon reached out to pros who'd "been in solar for a while" and took a few classes.

And it worked! "The thing about solar," she said, "is that it's not that complicated. My training at UB was in industrial design. We had courses in art and physics. As a designer, you have to know the science otherwise the engineers control the project."

Thus equipped with the scientific and technical know-how, Amon designed a colorful solar-powered ice cream cart, then pitched the concept at an event attended by Ben & Jerry's Ice Cream cofounder Ben Cohen. "I introduced myself and the cart," Amon recalled.

They bought it.

Later she formed her own company and called it Alt-Technica. A garden fountain followed, powered by photovoltaic cells. You can find it on the grounds of Cooper-Hewitt, the Smithsonian's National Design Museum on Manhattan's Upper Eastside. Amon has also collaborated on a series of science exhibits, technically challenging but whimsical as well, like the solar-powered cricket that chirps in the Long Island Children's Museum. And Solspherica, an interactive design competition that she and eco-designer Wendy Brawer won.

(continued on page 10)

BENGJERRY



Let there be light! Amelia Amon with one of her solar-powered lights in Weston, CT.



It shows a view of lower Manhattan and how it could be transformed with solar panels, wind generators, and green roofs. In addition, Amon has done extensive work on public lighting projects, including her stunning solar streetlamp for Austin Energy in Texas.

If such projects are aesthetically appealing, it's no accident. Amon believes people "don't pay attention if it isn't beautiful." In a paper called "Aesthetics: Ignore at our Peril," delivered to the American Solar Energy Society, Amon argued for more harmony, symmetry, and cultural relevance in energy design. Or risk losing public support, no matter how worthy the cause.

"Amelia is an artist," says Jamie Wolf, who owns a Connecticut home-building company called Wolfworks. "She sees things others don't—the evocative potential of products." Wolf met Amon through the Northeast Sustainable Energy Association and quickly became a fan. "In her quiet way," he says, "she brings people together to explore ideas. I'm always amazed that she seems to know everybody. She's a leader and an original thinker."

Designer Wendy Brawer concurs, underscoring that self-deprecation her friend displays. "Amelia cares as much about the big picture as her own career."

Back to that Union Square coffee shop. Her latte long since drained and now succumbing to jet lag, Amon finally begged off, but not before another warm smile, another rhetorical question, and another plea for change.

"Did you know that covering outdoor parking lots with solar panel canopies could provide 15–20 percent of New York State's electricity needs?" she asked, citing a University of Albany study. "That's for the whole state, not just New York City. Imagine! People think energy has to be ugly. Like telephone poles, transmissions towers, refineries. But we can present them with a less wasteful, more beautiful future. A lot of this is design issues."





By Leslie Geary

Next time you recover from a cold or even a major disease, you can thank your doctor and, most likely, a plant or two.

An estimated 50 percent of pharmaceutical compounds used to develop drugs in the last 30 years have been made from plants, and roughly 40 percent of prescription medications are derived from plant extracts or synthesized plant compounds.

So what might it mean if the plants that keep us healthy get sick themselves? What happens if they stop growing or change the way they grow because they can't get the nutrients they need?

"If a large part of the pharmacopeia of plant sources on this planet start disappearing we'll lose all that potential for research and development," says Steve Jackowicz, an assistant clinical professor at UB's Acupuncture Institute.

Jackowicz began thinking about how pollution, climate changes, various industries, and other factors affect medicinal herbs after he was invited to address the Taihu World Cultural Foundation in 2014. Based in China, the foundation is dedicated to promoting awareness of environmental issues challenging that country's development.

His initial research, "Effects of Global Anthropogenic Change on Traditional Chinese Medicinal Herbal Ingredients," found that farming techniques, pollution from coal mining, shifting wind patterns, monsoons, and other factors are impacting herbs used in traditional Chinese medicine (TCM), a practice that is taught at the University's Acupuncture Institute, which offers a master's degree in the specialty.

"TCM dates back 4,000 years and we have ornate records that go back the better part of 3,000 years. There's an enormous body of information showing the efficacy of Chinese herbs," says Jackowicz.

But now, things are changing for the worse. Pollution and environmental changes, he says, are inhibiting herbs' ability to fully absorb certain metabolites that help them grow, withstand threats, and—not insignificantly—make them medically invaluable.

"We may have a situation where solutions to very serious diseases may disappear not because we don't choose to explore them but because global environmental changes make the chemical constituents of the herbs no longer viable," Jackowicz continues. "If this process keeps going we'll lose out on many untold chemical compounds that might cure some serious disease one day."

Threats to plants, medicinal or otherwise, extend beyond China's borders, of course, as Jackowicz himself pointed out to dignitaries at the Taihu World Cultural Foundation. The South American rainforest, home of an estimated 70 percent of cancer-fighting drugs, for instance, is being deforested at a rate of 200,000 acres per day. And soil erosion is a huge threat around the world, including parts of the U.S.

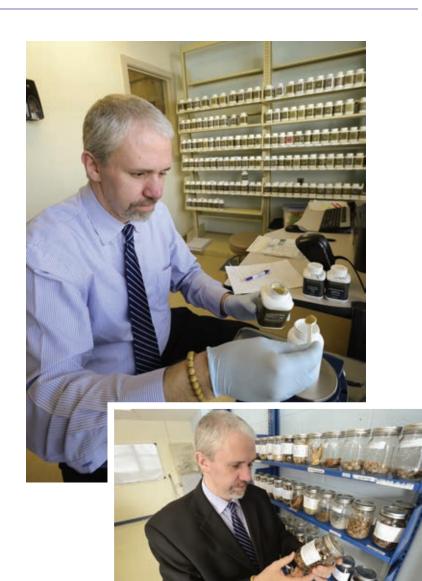
In China, Jackowicz describes an interconnected cause-and-effect process trigged by a host of factors. Farming techniques have caused desertification of the soil. Shifting wind patterns trigger monsoons and flooding. And chemical infiltration in the soil has altered the pH of the water table. The end result, he says, is that the herbs used in traditional Chinese medicine aren't absorbing critical components called primary and secondary metabolites.

"Primary metabolites allow plants to grow," he explains. "Without them, plants won't be as tall, as luxuriant. They don't go through a normal life cycle. Secondary metabolites are used by plants for defense. They also make plants medicinally useful."

The upshot: "Plants may look the same, maybe smaller, but they won't have the necessary things that make them medicinal. They're like a shell, an empty husk. From a medical perspective, they're no longer useful."

Nonetheless, Jackowitcz is hopeful.

"We can look at enough herbs and make a strong case to foundations like the Taihu World Cultural Foundation or the Chinese Academy of Science and say, 'This is what's going on.' We can look at the patterns that are most deleterious to these plants: micro-fine coal dusts, agrarian practices, acidity in the water. Those are man-made factors that can be changed."



How healthy? Steve Jackowitcz is focusing on medicinal herbs to see how they've been altered by pollution.



Used to treat colds to renal failure, medicinal plants are now threatened due to environmental changes.

The Value of Green

Danggui Angelica Sinesis:

Traditionally used to help blood circulation. Studies have shown pesticide adulteration in nearly three out of four samples from China.

Ju Hua Chrysanthemum:

Commonly used in teas and cures for common colds. Thirty-five pesticides and heavy metals have appeared in samples from China. Global warming has also accelerated the flower's growth phase, interfering with medicinal metabolite uptake.

Jin Yin Hua Honeysuckle:

Used in traditional cold formulas and also to treat yeast infection. One study has levels of 11.3 mg/kg of thiophanate-methyl pesticide residue in the flowers from China, well in excess of safe levels.

Mint Bohe:

Used as cold remedies, analgesic, and an herbal tea.

According to American Botanical Council, the aromatic herbs are flowering more than a week earlier than the beginning of the 20th century making the uptake of necessary medicinal metabolites more difficult.

Danshen Salvia Miltiorrhiza:

Used for treating chronic renal failure. Western medical researchers have used extracted chemicals from Salvia to address both some cancers and cerebrovascular disease. Studies have shown that salvia grown in the U.S. has more of the medicinal tanshinones and salvionic acid, chemicals that give the plant its medicinal properties.

- Leslie Geary



A Better Air Test

By using MEMS technology, engineering professor Xingguo Xiong tracks miniscule pollutants that pose big health threats.

By Leslie Geary



When engineering professor Dr. Xingguo (Michael) Xiong was in China last summer, he immediately noticed the smog and air pollution. "The economy has developed very quickly, but because of manufacturing and new construction, there's a lot of pollution and the air is very foggy, especially in large cities."

Air pollution regularly reaches dangerous levels in China, which monitors its air quality and posts warnings when needed. But Xiong, who is an associate professor of electrical and computer engineering at UB, wondered if there might be a better way to help individuals protect their health. Air quality can vary widely among specific neighborhoods, he explained, but government air monitoring covers larger areas, like entire cities.

"Maybe there's a lot of construction in a local area or a lot of manufacturing. If someone wants to do exercise in the park and only relies on government data, the city value may be different than the local value," he said. Thus began his work to create a personal air-monitoring system, called a PM 2.5 sensor, that could specifically detect miniscule air pollutants that pose the greatest threat to public health.

"Pollutants that are 2.5 microns or smaller are the most dangerous. When they are inhaled they go deeper into the lungs but not out, and they cause much more damage to the lungs," says Xiong. "They do have devices that can measure particulates that are 2.5 microns, but they are large and very expensive."

To turn his vision into reality, Xiong and his graduate students are harnessing super-small micro-electrical mechanical systems (or MEMS for short), since they allow the size of air-monitoring systems to be greatly reduced, says Xiong, who likens his work to driving a car.

"MEMS technology integrates both electrical circuits and mechanical components into a single system on chip so it can accomplish tasks that cannot be completed by electrical circuit alone," Xiong explains.

"Taking our human body as an example, if you want to drive a car, you need a smart brain so you know where to go. But this is not enough. You also need eyes, which are sensors to see where you're going. You need to use arms, hands, and feet, which are actuators to maneuver the car. MEMS technology allows us to greatly reduce the size of mechanical sensors and actuators, which are like the eyes, arms and legs, so they can be integrated with a microelectronic circuit, which is like the brain. Together they can implement a wide variety of functions for many applications."

Initial results based on computer simulations are encouraging, says Xiong, who is currently applying for funding to make prototypes.

"MEMS allow us to greatly reduce the size of the PM 2.5 sensor, so that it will become more portable and affordable as a carry-on device to monitor the air quality for health protection," says Xiong, whose device is planned to run on rechargeable, energy-efficient batteries and cost no more than \$100.



Welcome Back!

UB draws record number of alumni during Welcome Back Weekend

The University of Bridgeport came alive on October 18–19, during Welcome Back Weekend, the biggest alumni celebration on campus in 25 years.

Opening ceremonies kicked off at 10 a.m. Saturday at Knights Field, followed by a Harvest Fest on the Pedestrian Mall and a weekend filled with fond memories, rekindled friendships, and fabulous events including reunions for Campus Thunder and the Black Student Alliance, a hearty social hour the Barnum Publick House, and a fun run at Seaside Park.

Missed it? Welcome Back Weekend 2015 will be held October 10–11, so save the date! For information, please contact Aimee Marcella at (203) 576-4133 or alumni@bridgeport.edu. or follow us at facebook.com/UBridgeportAlumni ■



Trefz School Dean Lloyd Gibson honors longtime professor William Greenspan on his retirement.





Alumni couple Joan '75 and Michael Hedden '76



News Lines

Sudan to Hollywood

UB alumnus Ger Duany '05 stars in *The Good Lie* with Reese Witherspoon and returns to Bridgeport to showcase his movie.

By Leslie Geary



Ger Duany's role reflected his life as a Lost Boy.

When *The Good Lie* opened in movie theaters this winter, one face was immediately recognizable at the University of Bridgeport: actor and alumnus Ger Duany '05, who appeared in the Hollywood movie with Reese Witherspoon.

Duany will returns to Bridgeport in the Fall for a special screening and fundraiser for Humanity Helping Sudan Project. The nonprofit provides agricultural help so people in that war-torn country can overcome hunger, poverty, and disease.

Duany was among the 20,000 Lost Boys orphaned during the Sudanese civil war. He traveled hundreds of miles on foot across that country, fought as a child soldier, and spent years in refugee camps before coming to the United States as a refugee. He began playing basketball and enrolled at UB after being recruited by the men's basketball team.

In *The Good Lie*, art imitates life as Duany plays Jeremiah, a Sudanese refugee who is eventually relocated to Kansas City. He is helped and befriended by a jobs counselor played by Witherspoon.

Talking about the convergence between Hollywood and his personal history, Duany noted: "In life we have choices, and sometimes some of us get hit really hard, and we get up at different paces. I'm not sharing something really special. Sharing my life story is a way of finding my own peace. If you find it inspiring, I find your life inspiring, too."

Duany's career as an actor took off when he was cast in $I \heartsuit Huckabees$. He got the role after Mary Williams, founder of the Lost Boys Foundation with strong ties to Hollywood, contacted Duany's close friend, the late Manute Bol, the well-known Sudanese-born basketball star and Bol's fellow UB alumnus.

Bol called Duany and other Lost Boys from their network of friends. "We auditioned on a \$200 camcorder," Duany recalled. "Three months later they made a decision, and I got the role."

His other credits include *Restless City, The Fighter*, and *Ger: To Be Separate.* The crowd funded documentary follows Duany's return to South Sudan in search of his family in 2010.

Twice Born

Filmmaker Monica Lange's stories from a special delivery unit take center stage at "Necessary Voices."

By Jackie Hennessy

Emmy Award-winning documentary filmmaker Monica Lange is always looking for her next project and the idea for her upcoming PBS mini-series, *TWICE BORN, Stories from the Special Delivery Unit*, arrived in the best possible way: from her daughter.

Lange, the featured speaker at the November 20th "Necessary Voices," UB's series exploring the world of arts and ideas, has shaped much of her filmmaking around what she cares deeply about: medicine, mother-hood and, at the most basic level, human stories. So when her daughter, a nurse at the Children's Hospital of Philadelphia, (CHOP), told her about a team of surgeons who performed complex fetal surgery, operating on the tiniest of patients before they are born, Lange knew she had her next project.

"This film is the culmination of everything I'm interested in—medicine, motherhood, doing television—and because it was for PBS and they gave me the money I needed, I could do the film in the way I wanted to do it," Lange said. "I had a lot of editorial freedom which I don't usually have and so it's been very gratifying."

Lange shared insights into the process, the artistry and realities of documentary filmmaking for television. "Documentaries have a story arc, characters, unpredictable outcomes, a denouement, except that we're dealing with real lives, which is why they are so compelling," she said. "We don't use more than one camera and try to have a low profile. I don't always know what will happen. I discover as I go along."

Lange showed scenes from *Unlocking Autism*, the documentary that won an Emmy for "Television With a Conscience." And she shared dailies—raw footage—from *TWICE BORN, Stories from the Special Delivery Unit Special Deliver*, to illustrate that documentary filmmaking means asking a cab driver to sign a release form and haggling with him when he wants to be paid, encouraging a cameraman to re-shoot footage for dramatic effect, asking good questions and following where they lead. And it means "keeping your work hat on,"



All eyes and ears as Monica Lange shared behindthe-scenes stories from her career as a documentary filmmaker



even as the worst possible heartache or the most joyful moments unfold.

Ashad Choudary '18, a mass communications major who makes nature documentaries, said Lange's talk inspired him. "I love how she uses one camera," he said. "It's very professional but there is also so much emotion. I would like to work for her someday."

Lange pointed out she faced what all of the students did—looming deadlines. Much of December would be spent side by side with her longtime editor at Trailblazer Studios in Durham, North Carolina, turning 350 hours of film into a three hour miniseries. "It's the best part," she said. "Editing is where you really tell the story."

Diane Krumrey, chair and associate professor of the English Department, said Lange's talk "underscored the hard work and artistic sense needed to construct a narrative arc, whether fiction or nonfiction, written, spoken, or filmed. I think this translates directly to what all students must do in their academic writing."

It's work Lange said she truly loves. "You get immersed in people's lives," she said. "And they don't leave you." ■



News Lines

On the Go

Eighty thousand miles later, UB bike patrol officer Ralph Gonzalez is still going strong.

By Leslie Geary





It only had one gear, but when UB security officer Ralph Gonzalez was a kid, his gleaming red Schwinn bicycle was a ticket to untold adventure.

"On Saturdays I used to jump on my bicycle and ride all the way up to Easton to look at the farm animals and drink some milk. Then I'd ride back home to Bridgeport," says Gonzalez. "It was a 20-inch bike, what the kids do tricks with today. Me and my friend Freddie, we'd go out there all day."

Gonzalez never stopped pedaling. For the past two decades he's led the campus security bike patrol, and during that time, he's seen it all.

"When I first came here, there were only three dorms open: Cooper, Chaffee, and Seeley. It was terrible!" says Gonzalez, 51. "There were car robberies and about 900 kids on campus at the time. Now, it's beautiful out here."



Gonzalez is well placed to make such assessments. He and 13 other bike patrol officers ride an average 21.3 miles a day, per man. That works out to roughly 80,000 miles alone for Gonzalez over his career, maybe even more, depending on factors like the weather; he knows every nook, pathway, and corner on campus.

"To me," he says, "it's just fun. I have a blast riding a bike."

Of course, there's riding a bike and *riding* a bike. Gonzalez does the latter with athleticism and style. Flight of stairs? No problem. Chasing a crook who's dumped a stolen pocketbook? Because Gonzalez doesn't need to stop his bike to scoop up hastily discarded items, he can continue pursuing a suspect with barely a break in his pace. He's also mastered techniques to knock bad guys down without getting knocked from his own bike.

Maneuvers like these may look easy in the movies, but they take time and practice to learn. To keep the UB patrols extra sharp, Gonzalez leads training sessions for fellow UB bike officers throughout the year. Securitas, the security vending firm contracted with UB, has also hired him to train patrols assigned to other properties.

Other skills are equally value. Take bike repair. "People come up to me and ask me to help with a flat or something," he says. "Why not? I'll go over their bike and tighten it up for them. It's part of being a healthy community."

Because he's so visible, Gonzalez has also become a fixture off campus. Wander out to Park Avenue, for instance, and you'll likely see Gonzalez chatting with local elementary school kids and their parents as they walk to and from school. Or maybe he's pedaled over to Iranistan Avenue, close to the Arnold Bernhard Center and the expansive playing fields used for pickup and community soccer matches. Or across campus, near the Health Sciences Building on Lafayette Street, giving directions to a lost driver looking for the turn off to the Long Island ferry.

"It's better than being in a patrol car," he says. "You get to know the kids and the neighborhood.

They know me."

Ralph Gonzalez

In Their Shoes

UB students attend Heifer International's Global Gateway program to see what life's like for those in need.

By Leslie Geary



Yams, turkey, and pumpkin pie may be typical menu items in November, but for a dozen University students, the month brought an opportunity to dine on ground barley and yak's milk prepared over an open fire.

The traditional Tibetan lunch took place during a unique visit to Heifer International's Global Gateway program in Rutland, Massachusetts. For 24 hours on the weekend before Thanksgiving, the UB students lived in simulated global villages in order to gain a better understanding of what daily life is like for millions of impoverished individuals worldwide.

"Our students at UB come from so many countries, but the visit, with the opportunity to see how millions live on so little around the world, was an eye-opening experience for all of us," said Jennifer Turner, civic engagement coordinator in the Office of Campus Activities and Civic Engagement who arranged the trip.

Students spent 48 hours doing manual labor, feeding farm animals, and participating in at-length discussions about a variety of topics inspired by their visit: global

allocation of resources, natural disasters, and human rights. Topics were made far more palpable by participating in activities in simulated villages of South America, Appalachia, Asia, and Europe, said Turner.

The group also prepared and dined on simple meals: Tibetan lunch of yak's milk or a meager stew for 13 people that contained a half of a cabbage, two tomatoes, and two potatoes. They stayed overnight in a simulated Polish village, playing different roles within a family.

"Some of our family members were injured; two were pregnant. I was assigned the role of wise elder and could not speak except to answer questions with a yes or no," said Turner. "We were given money and told we would need to purchase food for dinner and breakfast from the market. We had a very difficult time starting our fire in our stove, so it took a while to cook dinner."

There were no cellphones, books, or other distractions, either. "It was really amazing to hear what all of the students got out of this experience," said Turner. "I definitely plan to make this an annual event."







News Lines

Winning Start-Up

UB business student wins Chunhui Cup and \$830,000 seed money from Chinese government.

By Leslie Geary



Bao Lei, a graduate student at the Trefz School of Business, has won a Chunhui Cup and \$830,000 in funding at the Chinese Oversea Students Innovation and Entrepreneurship Competition, which is sponsored by the Chinese government.

Lei, 22, was awarded \$330,000 in initial capital and a \$500,000 interest-free loan from the Chinese government, along with office space in China and other assistance, for One Leaf, her start-up that will package and sell specialty tea.

Lei is earning her MBA.

"In China, there's a lot of tea but there aren't brands, and it's hard for people to choose because nothing stands out. I'm developing very high-quality tea, with different flavors, that will help people choose," said Lei, adding that her initial market surveys showed that consumers wanted three kinds of tea: "black and green tea; fruity tea, like the European or American-type of tea; and the kind of tea to slim down your body fat."

Entering the tea business was inevitable, she added.

"My hometown is in Anhui Province, which is the country's largest tea market. It's where Maofeng, Guapian, and black tea are grown. They are three of the top ten most famous kinds of tea in China," said Lei. "My family and I have studied various teas for several years."

The Chunhui Cup is sponsored by the Chinese Ministry of Education and Ministries of Science and Technology to promote entrepreneurial ideas from Chinese students who are overseas with the aim of bringing them back to China to start businesses and careers there.

Contestants are invited to submit business plans that are evaluated by a panel of experts. This year, the Chunhui Cup honored 188 individuals around the world. Lei was among 58 from the Tri-State Area who met with potential investors and received her award at the Chinese Consulate in New York in September.



Musical Gift

A special Billie Holiday tribute dazzles.

By Leslie Geary



BackCountry Jazz, in conjunction with the University of Bridgeport Music & Performing Arts program, was proud to present Billie Holiday Celebration Concerts, featuring renowned jazz artists performing for more than 1,500 local students and members of the community on November 20.

"During my years teaching high school in New Haven, I was fortunate to be able to bring my students to wonderful performances at Yale University, free of charge. I am so thrilled that the University of Bridgeport was able to provide a similar experience for the students and teachers of the Bridgeport Public Schools. I hope this is the first of many." said UB music faculty member Frank Martignetti.

BackCountry Jazz founder and tenor saxophonist Bennie Wallace added: "It has long been my dream to have an annual jazz concert for Bridgeport young people, much like the youth concerts of many symphony orchestras. Jazz is the ideal form to awaken a love of music. Kids can relate to the spirit and feel of this music because it is an integral part of our culture. Elements of jazz are found in all American music of the last hundred years."

The Billie Holiday Celebration Concerts were sponsored by the University, BackCountry Jazz, People's United Bank, and Arthur Landi, who is a member of the UB Board of Trustees and the BackCountry Jazz Advisory Board.

Since 2007, BackCountry Jazz has been presenting outstanding concerts with major artists and rising jazz stars and educating and inspiring youth in their mission to celebrate, preserve and expand the rich tradition of Jazz.

The all-star ensemble for Billie Holiday Celebration Concerts featured Carla Cook and Charenee Wade, vocals; Donald Vega, piano; Peter Washington, bass; and Herlin Riley, drums. They came from all over the country to perform under Wallace's direction at UB and at jazz venues throughout the region.





News Lines

Excellence Online

U.S. News ranks University of Bridgeport online education among the best in the nation.

By Leslie Geary

For the third consecutive year, the University of Bridgeport's (UB) online degree programs have been named among the top in the nation, according to the *U.S. News and World Report*'s "2015 Best Online Education Programs."

The University's information technology program, which includes master's degree programs in computer science and technology management, was ranked 13th in the nation. Its online bachelor's general studies program was ranked in the top 100, and its online engineering track was ranked in the top 50.

U.S. News bases the standings on a variety of factors, including academic and support services for students, faculty training, admissions criterion, program reputation, technologies, student satisfaction, and graduation rates.

A pioneer in distance-learning, UB was the first university in Connecticut to offer online classes in 1997, when it launched online courses in human nutrition. Today, more than 600 distance learning students enrolled in over 250 online classes in eight online degree programs in a variety of fields, from the health sciences to business and engineering.



Mohammad Najam is currently enrolled in the online MBA program.

Faculty Lines



Speaking of the Human Genome ...

James Watson and Francis Crick solved the double-helix structure of DNA more than 60 years ago, but the field of genomics remains vast and unchartered. DNA, the recipe for who and what we are, is comprised of pairs of twisted strands containing four chemical units, or nucleotide bases: adenine (A), thymine (T), guanine (G), and cytosine (C). But how do genes work when specific proteins bind onto certain nucleotide sequences in order to turn them on and off?

Answering that question could provide scientists with powerful tools to fight a range of illnesses, and it's the root of research by biomedical engineering assistant professor **Christian Bach** and co-investigator **Prabir Patra**, chair of the Biomedical Engineering Department.

"What I really want to know is how nature regulates the binding," says Bach. "In our experiments they bind everywhere, killing cells. We have absolutely no clue how nature works doing the right thing."

This fall, the Faculty Research Council awarded Bach and Patra a Seed Money Grant worth \$5,936 to help them determine how the three-fingered protein, called SP1, specifically binds to a limited number of nine nucleotide sequences. That, in turn, might help figure out how to target specific genes and single locations in the human genome for protein binding.

"We have to figure out how to design a three-finger protein that binds to just one location in the human genome?" Professor Bach asks. "Genome regulation is the bigger picture because when you regulate the genome you can control everything, from cancer to aging."

- Leslie Geary

Faculty Lines



The Color of Strong

UB security guard **Harry Bell** knows all about the power of positive thinking. He was only a few hours hold when his drug-addicted mother left him at the hospital, but he was raised by an aunt, encouraged by an older cousin, and watched over by an elementary school teacher named Howard Owens, with whom he grew to be lifelong friends.

Though his family wasn't well off—Bell grew up in Trumbull Gardens public housing in Bridgeport—he began writing down positive thoughts on slips of paper, things like: "It's not where you start, it's where you finish" and "If you can stand tall in the dark, you will be amazed of what you can do in the light."

Now Bell has published a coloring book called *Color a Positive Thought* with the aim of inspiring young people. Curiale School in Bridgeport, where Bell also works as a security guard, bought hundreds of copies for its students, and Bell has been leading youth empowerment workshops at the SoNo Library in Norwalk, Connecticut. Children send Bell enthusiastic notes. They're not the only ones: In January, Senator Christopher Scott Murphy (D-CT) wrote Bell a fan letter, offering his congratulations and support.

The illustrations in *Color a Positive Thought*, which were drawn by fellow UB security guard **Ed Hernandez**, show children doing things like looking at the façade of a housing project (inspired by Trumbull Gardens, Bell says) in one panel then looking at the façade of the White House in another. Bell's message is loud and clear: it's possible to go far so aim your sights high.

"I want kids to see positives in life," says Bell, who was inspired to publish the coloring book after he searched fruitlessly for books that would inspire and empower his son Sa-mahj Bell. "I didn't find anything," he said. So he looked at the positive messages he'd been writing and saving for years, and knew he had the start of a great idea.

In the meantime, Bell's planning to write another book with Hernandez, lead more workshops for youth, and continues to reach students of all ages. "Kids don't think they can do things anymore," he said. "I want to show them there's more."

For more, look for the *Color a Positive*Thought Facebook page or go to

http://colorapositivethought.com. - L.G.



New Nursing School, New Dean

Dr. Carol Papp was named Founding Dean of the School of Nursing, effective January 20.

For the past 30 years, Papp has worked as a nursing educator, manager, and clinical leader.

Most recently, she served as the director of the Bridgeport Hospital School of Nursing (BHSN) for four years, where she successfully led the school in receiving six additional years of national nursing accreditation, five additional years of RN program licensure, and five additional years of college credit approval through the National College Credit Recommendation Service for the BHSN nursing program.

"She brings a wealth of knowledge and experience to her new role and our community," said Provost **Hans van der Giessen.**

Dr. Papp holds a Bachelor of Science degree in Nursing from St. Anselm's College, a Master of Science degree in Counseling from the University of Bridgeport, and a Doctor of Nursing Practice from the Case Western Reserve University Frances Payne Bolton School of Nursing — L.G.





Thumbs up? That depends.

If Nathaniel Hawthorne wrote *The Scarlet Letter* today, Hester Prynne wouldn't have to wear a massive scarlet letter A on her dress: she'd have the Internet to worry about. Its dizzying reach and speed makes it a cinch to damage a reputation. But it's not just individuals who feel the sting of a bad rap: companies can lose millions when negative online reviews go viral.

That fascinates Trefz School of Business assistant professor **Nikki Lee-Wingate**, whose research examines how consumers view each other online and how those perceptions influence the way they feel about companies.

"Due to the explosive growth of Internet usage, consumers are able to express their personal thoughts to a global community of readers," says Lee-Wingate, who teaches marketing. "The problem is that these thoughts are often ridden with emotions, and emotions are contagious. Because of that, companies suffer, sometimes far too much, and with ungrounded criticism."

Consumers who feel similar to authors of online reviews are more likely to hold negative attitudes about a company, due to emotional contagion, she notes. Those who feel dissimilar are less likely to be influenced.

Lee-Wingate explores various management techniques, such as clearly informing readers of the similarities and dissimilarities among writers and observers of emotional reviews, as potential means for companies to practically mitigate damage wrought by negative online reviews. — L.G.

Time Traveling with Vitamin B12

What's not to love about Vitamin B12?

This über-vitamin—found in meat, poultry, eggs, and dairy but not plants—keeps red blood cells healthy, guards against heart disease and cancer, and boasts a slew of other perks. Conversely, a B12 deficiency can lead to problems ranging from depression to poor memory, asthma, impaired vision, fatigue and more. That's why doctors commonly prescribe B12 supplements to individuals who are at risk of being B12 deficient, including vegetarians, breast-feeding women, and smokers.

The bad news? Making supplements isn't easy, notes biology professor **Amanda Petrus**, whose research turns to bacteria for help in creating the supplement.

"B12 is a very complicated molecule, and bacteria have worked out a very efficient way to make it," says Petrus. "For example, if we make it in a lab, we have to follow about 70-plus steps. Bacteria can do it in 30, and they have all had the time of evolution to figure out the process."

Scientists have a partial understanding of how bacteria make B12, but questions remain. Petrus said she and UB chemistry professor **Sergio Bibis** and Yale University post-doctoral fellow Kristen Swithers aim to "fill in some of the holes in our understanding about B12 production and synthesis in bacteria."

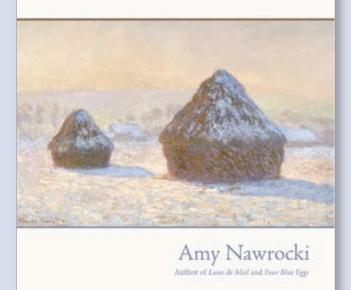
That, in turn, could shed light for more efficient ways to produce B12.

"Currently, supplemental B12 is made in the lab through fermentation of select microorganisms," says Petrus, "but there are a lot of different organisms that can make B12, too, and they probably have tricks up their sleeves that could help improve and streamline B12 production." ■ − L.G.



Book Lines

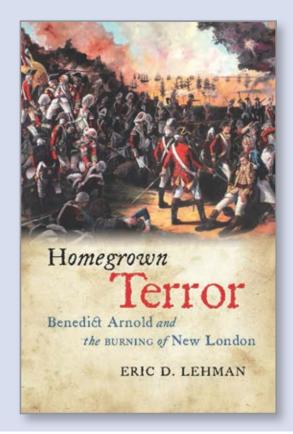
Reconnaissance

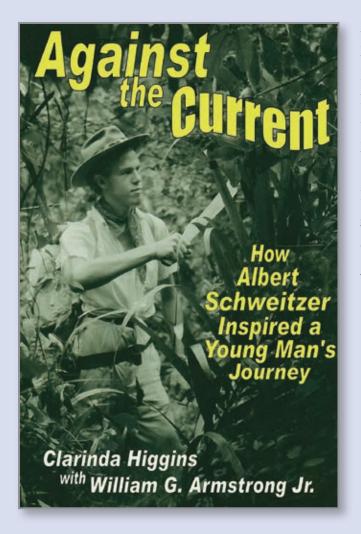


What inspires artists and what does their work mean to us? In her latest collection, *Reconnaissance* (Homebound Publications), poet and UB English professor Amy Nawrocki considers how we're moved by art and understands our seemingly universal need to respond. As the title to this exquisitely wrought collection of poems suggests, Nawrocki "plays the coy, indistinct watcher" who trains her sights on all kinds of art—Chagall's stained glass, Monet's light-infused canvases, a Rothko series or music by Charlie Parker. She ventures out of museums, steps away from curated bookshelves, and finds that creativity abounds in unexpected ways and places: a sunflower tattoo on her shoulder, etched while accompanied by a classmate who later dies in a freak accident ("we wanted to ink into the eternal") becomes "the story I kept hidden," a miniature life work etched on skin.

Later, Nawrocki writes "One of van Gogh's sunflowers [dies] inside me, just beneath my ribs," suggesting the visceral desire to create touches all of us in ways that are broader and deeper than we might first imagine.

Benedict Arnold is America's first and possibly most reviled traitor. In his latest book, Homegrown Terror: Benedict Arnold and the Burning of New London (Garnet Books), UB English professor Eric D. Lehman offers a deeper look at Arnold the man. A loyalist who betrayed his comrades, he transformed from a hero into a monster-like figure who savagely massacred his neighbors and destroyed their homes in the burning of New London. Hailed as a "tour de force of research," Homegrown Terror offers various perspectives, from those of his former comrades, like Jonathan Trumbull and Silas Deane, to the murdered Colonel Ledyard. By rethinking Arnold, Lehman sheds light on the ethics of the dawning nation and the way colonial America responded to betrayal and terror.

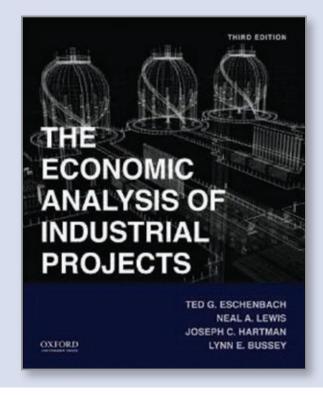




Mark Higgins was an 18-year-old prep school graduate when he left home to work for Dr. Albert Schweitzer in the jungles of West Africa. Determined to chart his own destiny far from the reaches of his influential New England family, as well as by Schweitzer's "Reverence for Life" call to action, Higgins worked as a handyman at Schweitzer's Gabon-based hospital before being trained as a medical technician. *Against the Current* (Oakham Press), by Higgins's cousin and UB alumna Carlinda Higgins '75 and coauthor William G. Armstrong Jr., captures the grit, glamour, danger, and exhilaration of Higgins's experience working for Schweitzer before undertaking his most grueling challenge of all: a solo journey across Africa.

Neal Lewis and fellow coeditors of *The Economic Analysis of Industrial Projects* (Oxford) provide the best possible methods for applying economic analysis theory to practice. The book, which Lewis et al have completely revised, includes five additional chapters and material on real options analysis and replacement analysis. The text also features extensive coverage of theoretical foundations of engineering economics.

Leslie Geary



Focus on: Rindy Higgins '75

Background: Rindy Higgins earned her master's degree in education at UB, but her science education began when she was a child, exploring the woods with her father. Inspired by this backyard learning, Higgins developed immersive, award-winning science programs that served as national models of interactive learning. She went on to develop multidisciplinary programs throughout Connecticut that have advanced public understanding and support for the region's delicate ecosystems.

Latest accomplishment: Higgins's book, *Against the Current*, (see "Book Lines" on page 29) was published in 2014. She currently serves as director of the Nature Center at Sherwood Island State Park.

Did you spend most of your time outdoors as a child?

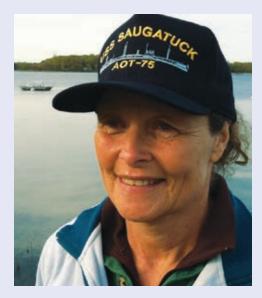
Yes, I was outside a lot with my father. We had to turn over every log and look what was there! We did a lot of hiking. It was a very nature-driven and engineering-driven childhood. How did a well work when you pull up water? I was inventing things all the time. I invented a communications system with a friend who lived about a third of a mile away. We set up a pulley system so we could attach paper notes and send them through the woods. We had to climb trees to get the line over the branches. How did things work? My father taught me to ask questions.

What brought you to UB?

I was a reading specialist in New Canaan, Connecticut, at the time, and I didn't like how reading was being taught. It wasn't reaching enough of the kids I was teaching. There were a lot of Vietnamese kids after the war who had been brought back by the church, but the old way of teaching reading, with memorization, wasn't working. I took a workshop at UB with [the late] professor Dr. Lydia Duggins. Her approach to reading flowed from the way sounds are first made in infancy. Reading was just speech on paper. I thought, "This is making sense. It flows, like science flows." I had a great experience.

You eventually started teaching science and, to a certain degree, set aside books. Why?

Science is about asking questions. It's about the search for answers. It's about doing and getting out there! The students I had thought scientists were like Frankenstein characters in white lab coats. They never pictured a scientist with a bucket of water or a net with a clip board. They didn't see science in the field. So I developed a program with the New Canaan Nature Center. I had the kids gather pond water and look under the microscope. They collected samples in tall skinny containers and short fat ones and saw they held the same amount. They identified leaves and found matches, traced maples, and counted up the square area a leaf covered. Then they'd rip them apart. Were they bigger or did it take up the same area? The science incorporated math and reading.



And that was radical?

Yes. It was the 1980s, you didn't do that. You didn't leave the classroom. Sure, kids did go on field trips, but they were things like going to the Bronx Zoo. It wasn't hands-on education. My students were at the Nature Center every week! The parents drove; I had some devoted parents!

How did your program catch on?

I started doing workshops with other teachers, and someone suggested I submit the program to the National Science Teachers Association. I had lesson plans, the curriculum. It was ready to roll out. This was in 1982. So I submitted it. NTSA has a national convention every year and it won the Gold Award! It was around April in Chicago, and I was very pregnant, but I was determined to go. I waddled upstage to receive the award.

Were you surprised?

I was more delighted. It was a good idea and a good program; it worked. I was going to continue with it whether we got the prize or not. It helped get the word out that we needed to get the kids *out there*.



You used the same hands-on approach when you were hired by the Maritime Aquarium to be its curriculum manager.

I can remember the first class I had there. It was with a bunch of first graders and I was giving a shark lecture. I saw all of the deadpan faces and thought, 'This won't work.' In 24 hours I wrote a completely new program. We had a table with shark skin, a tape recorder the kids could push a button on to hear questions if they couldn't read them. Touch the shark skin, what does feel like? Use a magnifying glass to look. Draw picture of what you see. Other stations had shark jaws and they counted rows of teeth. There was a lot of cacophony in the room. It was wonderful! The kids were engaged, busy.

But you wanted to reach a broader audience? Is that why you wrote the shell-fishing columns for the *Norwalk Hour*?

The shellfishing columns were meant to reconnect people to their natural world, to keep heritage alive These days, you go to the grocery store and buy shellfish. But years ago, people shellfished in the Sound all the time. The columns were about reaching people you wouldn't normally reach—the adult who owns property five minutes away from Long Island Sound and doesn't understand that doing an oil change in the driveway may affect it. I call it "connective tissue." How do we find that connection? How do you get someone to care who didn't care a few minutes ago? Just because they see a shark at the Aquarium, will they really care? Will they boycott shark fin soup? That's always been the big one for me. Will they care? Will they take action? I can tell in a matter of seconds if they will be interested, if I can make that boring blue mussel in their hand become a fascination. I see their face change, and it gives me the feedback to keep going.

— Interview by Leslie Geary



Alumni Lines

Would you like to share news of your own or nominate an alum to be interviewed for a "Focus On" interview? We're interested in what you're doing, and so are your classmates! Contact: Knightlines, Cortright Hall, 219 Park Avenue, Bridgeport, CT 06604 or knightlines@bridgeport.edu.

Be sure to include your full name, contact information, and class year.

1959

Donald J. Spillane, a graduate of the School of Engineering, passed away on September 11, 2014. He is survived by his wife, Nancy Horn Spillane.

1960

Everett Merritt has been inducted into the Virginia-DC Soccer Hall of Fame. The former Purple Knight contributed to the UB's men's soccer team's performance in the finals of the first NCAA Division I tournament in 1959. He was selected to the All-New England squad for three years running. After graduation, Merritt played with three National Soccer League teams in Washington, DC: Maggies, which finished second in the League and won the Roland Cup; the Washington Internationals Soccer Club; and the British Lions. He coached in the National Capital Soccer League for about ten years, during which time his teams won two NCSL Division One titles and Virginia State Championships, along with five consecutive Arlington Invitational Fall Tournament titles. Merritt was inducted into the UB Hall of Fame in 2009.

1963

Artist and alumna **Gloria Coker** continues to paint; her work can be seen at her webpage, www.gloriacokerfineart.com or

on Facebook (search for Gloria Coker Fine Art). "My children have done well. [Daughter] Dr. Leslie Coker practices dermatology with my husband at Associates in Dermatology in Hampton, Virginia, and my son, Dr. W.L.Coker III, is a dentist in Richmond," she writes. "I have three grandchildren."



1966

Joan Farcas was unable to attend the Campus Thunder Reunion during Welcome Back Weekend in October, but she recalls her days on the stage with great fondness. "My show was Nobody but Barnum, and I was a dancer. What fun!" After earning her English degree, the School of Arts and Sciences alumna attended law school at Suffolk University. Earlier this year she received the Liberty Bell Award at the Greater Bridgeport Bar Association Dinner, which she attended with her husband, Dr. David Gianetti. "It was for service to the community and to the bar," she says. As founder of a local paralegal program, she has trained hundreds of paralegals in Connecticut.

1968

Jeffrey Bieder has been inducted into New York State Basketball Hall of Fame. He is currently the athletic director at Magen David High School in Brooklyn, NY. Bieder, who earned a bachelor's in health and physical education while at UB, lives in Woodmere, NY, and writes, "I loved my four years at UB."

1975

Noreen Miller isn't slowing down soon. After working at the Veterans Hospital in West Haven, CT, as a kinesiotherapist for 13 years, she moved to Beacon Falls, where she lives with her partner of 12 years along with her two horses and two cats. She's also managed a kennel for several years and bred Golden Retrievers and Great Danes. When not in Connecticut, Miller is on the road. She's a 25-year member of the Boston based women's motorcycle club, Moving Violations, and has also traveled throughout the U.S. with her softball team, which reached playoffs in several national tournaments. She's a member of the Connecticut senior women's basketball team, which won the gold medal at the national tournament in Cleveland in 2014. Miller, who competes in the 60-65 age bracket, writes: "I'm looking for other senior basketball players, so please contact me!" She can be reached at silverado96@ comcast.net.

1979

Celeste Terry has received one of the best gifts a teacher can get: heartfelt admiration from her students, who nominated her for Outstanding Field Instructor at Mandel School of Applied Social Sciences at Case Western Reserve University (she won). The award recognizes Terry's work with graduate social work students. When not teaching, Terry serves as assistant executive director of the United Black Fund of Greater Cleveland. She is the author of Transforming Non-Profits for Relevancy in Challenging Times.

1981

We're delighted to receive a photo from **Curtis Forbes**, who was honored by the Dutchess County Executive and Arts mid-Hudson (formerly the Dutchess County



Arts Council) as an outstanding individual affecting the arts in county. Forbes—"the tall guy in the center"—was named 2014 Patron of the Arts at the October event. "It was a wonderful and exciting night," he writes. No stranger to public recognition, Forbes also reports that two Class of 2014 high school seniors from Dutchess and Schenectady Counties received financial assistance for college, thanks to the New York State Affirmative Action Officers Association, which established the Curtis Ray Forbes Academic Scholarship in 2013. Forbes is the current president of the Association and is employed with Dutchess County as the **Equal Employment Opportunity** Officer.

1984

Patricia L. Lewis has been appointed to senior vice president of Human Resources at Lockheed Martin. Lewis has more than 25



years of experience in developing and implementing global human resources strategies. She joined Lockheed Martin in 2011 as vice president, Human Resources for the Electronic Systems business area, and most recently served as the vice president, Human Resources for Information Systems & Global Solutions. Prior to joining Lockheed Martin, she served in a variety of increasingly responsible positions at IBM and DuPont. While at UB, Lewis earned her Bachelor of Science in Industrial Relations Management.

Andrew B. Cahill has passed away. He was a much-respected cardiovascular perfusionist and an accomplished chef who rewarded his family nightly with his culinary explorations. He shared his love of fine foods, Formula One racing and travel with his wife Dr. Anne T. Cahill, who survives him. He is also survived by daughter McKenna E. Cahill; step-daughter Lydia M. Gatzow; mother Marie E. Cahill; and brother Edward Cahill.

1985

Kathleen Brady and Lynne Falcigno '89 stopped by to visit a UB representative at Education Day at the Yale-New Haven Hospital, Saint Raphael Campus (YNHHSRC). The nursing school alumnae expressed their gratitude for having earned their degrees at UB.



The sunshine state offered a sunny backdrop and a great turnout for alumni receptions in Orlando, Ft. Myers, and Ft. Lauderdale in January. Didn't receive an invitation? Send us your address at alumni@bridgeport.edu or call 203-576-4151.



Hello, Ft. Lauderdale!

(Back, from left) Aimee Marcella '12, director of Alumni Relations, Manny Altneu '72, Ron Rubin '66, Howard Copelan '70, Harry Peters '57, and Len Bennett '69 (Front, from left) Carol Baker '64, Marion Gordon '64, Jane Cohen '64, Meryl Schwartz '86, and Nancy Copelan '68



... and Ft. Myers!

(Back, from left) John Martin '66, Tom Sabella '65, Steven Hartley '66, Donna Goldblatt '71, Richard Goldblatt '68, Erik Barber '05, Michael Churilla '66, Al Churilla '62, Aimee Marcella '12, director of Alumni Relations, and Stephanie Rucker '10 (Front, from left) Karen Sabella '66, Don Kaiser '61, and Barbara Puffer '72

Alumni Lines



UB Men's Basketball alumni gathered for a friendly game of hoops in Hubbell Gymnasium on November 1. The game was organized by Coach Mike Ruane, Associate Coach Kranthi Senadhi, and Assistant Coach Will Logan.



Bill Brew '62 and Norm Gazaille show their Purple Knight pride at Gazaille's barbershop, Norm's Clean Cuts, in Dunnelllon, FL, where UB's purple pennant and winning gymnastics team shirt are prominently featured. Thank you, Bill and Norm, for your support of UB athletics!



Boston-area alumni convened for a special holiday reception with UB President Neil Salonen. Purple Knights traded stories about everything from Seeley Hall to the new Trefz School of Business—a good time was had by all! (From left) Linda Landsberg '63, Beverly Orenstein '64, Senthil Balasubramanian '04, Ted Orenstein '64, and Keith Rowe '07.



Thirty Phi Lambda Nu sisters met in Manhattan this past October for a weekend of fun and reminisced about their days on campus. Lynn Paster Offsey '72 coordinated the reunion, which included several members of the original PLN class.



Make it a Dozen!

Taekwondo team brings home 12 medals from National Open Tournament

By Alona Gaiek '15

Hard work and perseverance paid off for the UB taekwondo team, when it returned from the 2015 U.S. Open Taekwondo Championship with 12 medals.

Team medalists included: Edward Jeong (gold medal in the group competition, a silver in the individual and bronze in pair perfor-

mances); Gunsoo Kim (gold in group and individual and bronze in pair performances); Seongkyung Lee (gold in group performance); Hyeeun Kim (gold in group, silver in individual, and bronze in pair performances); and Hyunwoon Kim (gold in group and bronze in individual performances).

Court of Second Chances family, William mother and ste

For the men's basketball team, redemption is as important as rebounds.

By Christopher Granozio

On virtually every sports team, there's a story of a player who has overcome a major obstacle. But it is the rarest of clubs that can boast multiple examples. Meet the 2014-15 Bridgeport Purple Knights, whose roster includes young men who admittedly stole, became hooked on drugs, drove drunk, and spent time behind bars. One survived a vicious attack that left him permanently disfigured. But their coach Mike Ruane, a one-time user himself, wouldn't have it any other way.

"It only makes sense for me to bring in people who have faced adversity," Ruane admits. "I want to help people grow. I like guys who appreciate this opportunity that comes along once in a lifetime."

This is the story of redemption, restitution, and hope. Of making something out of nothing.

Meet Willie Williams III, the Knights' third-leading scorer and rebounder who grew up in nearby Norwalk but after struggling at the local community college was shipped out to Reading, Pennsylvania, to live with his father, a transportation company owner.

"I thought school might not be for me," the 6-6 forward said. "So I started working. But I was arrested for throwing a snowball at a cop. Spent a week in jail."

Williams was also arrested for driving under the influence, dozing off, and totaling his dad's car on a quiet street in the wee hours after a night of drinking alcohol and smoking marijuana. A master manipulator, he had also developed the nasty little habit of stealing cash. Hundreds, if not thousands, over a period of two years. Right out of his father's wallet.

"He probably always suspected me, but one night he caught me," the 26-year-old senior recalled. "He threat-ened to send me back to Norwalk."

With his lies exposed and shame brought upon his

family, Williams reached his low point. In front of his mother and stepfather—both of whom are ordained ministers—he mapped out a plan to pull himself out of the abyss, scribbling on a sheet of paper three specific goals: 1) pay off his college loan, 2) continue his education, and 3) play college basketball. During his time in Reading, when he wasn't indulging in self-destructive behavior, Williams had been honing his skills on the local basketball courts and genuinely enjoyed playing the game. Now was the time to put that burgeoning talent to good use.

"I grew up in a Christian household," Williams said. "I was the prodigal son and I rebelled. But I found my own understanding through God. Now I know I don't have to be perfect."

But in order to raise his GPA and earn NCAA eligibility, Williams used perfection as a distant goal. He worked multiple jobs at UPS and Home Depot, paid off his loan in four months, and enrolled in classes at a community college in upstate New York. His grades improved, and on the court, he averaged a solid 16.5 points and 13.7 rebounds per game while making 58 percent of his shots with the Generals.

Several coaches took notice, including UB's assistant coach Kranthi Senadhi. He recommended him to Ruane, who didn't hesitate to bring him aboard. After all, he saw a little of himself in Willie.

Work Hard and Want It

"My father was alcoholic and died when I was young," the 15-year Knights coach revealed. "There was no discipline in the house. I had problems with drugs and alcohol, and I sacrificed the academics. Basketball was a savior for me. I took coaches as my fathers. They were my role models."

Alvernia College coach Rod Hand was among those role models who saw a light flickering in Ruane. After initially flunking out, Ruane soldiered on, receiving his diploma after seven years at Alvernia, the age of 25. "I finally realized you've got to work hard and want it." he



said. "That's when I first saw my vocation as a coach and a mentor to people like that."

There's a symmetry with his 26-year-old star player. Williams—who missed time early in the season due to injuries—has emerged as one of the East Coast Conference's premier stars, earning two of the last three Player of the Week awards while routinely compiling double-doubles. The communications major relishes his self-appointed role with the team.

"I'm the leader and I'm a good player to follow," he confidently admits. "We push each other and joke with each other but we're all focused. We have our problems but they're not unsolvable. We pray before the games and channel that energy. We really believe we're not doing this alone. We want to go far this season."

A Brotherhood

One of Williams's closest friends on the team, Mike Theophil, agrees that a higher power guides the Purple Knights' fortunes.

"There's really a brotherhood this year," the sophomore guard said. "Everybody plays for each other

instead of for themselves, and I feel we're going to go far because of that."

Like Williams, Theophil came to Bridgeport as something of a reclamation project. A one-time aspiring actor, the Fairfield native became seduced by a variety of drugs and took great pride in hiding his addiction from everyone. Though he loved basketball, Theophil alienated his family and high school coach, Brian Silvestro (they've since reconciled), and indulged in reckless behavior. The self-destructive spiral came to an end on December 28, 2011, the day he embraced Christianity and chose faith over failure.

"I honestly don't know if I'd be here without Christ," the Ludlowe High School product admitted. "When I turned 21, I was almost a year sober and I thought to myself: 'Should I drink?' but then I saw an ESPN 30-for-30 show on ex-basketball player Chris Herren and I decided to go to one of his presentations." Herren overcame drug addiction and relays his experiences to millions of people across the country.

Today, Theophil is three years sober, a Dean's List student at UB, and hopeful to follow in Herren's shoes (continued on page 38)

as a motivational speaker when he's done with basketball while using the gospel as his guide.

Paul Krumins, a one-time local AAU coach who has known Theophil since he was in eighth grade and is one of his closest mentors, said the troubled youth used to spend every day at Wakeman Boys and Girls Club, never wanting to go home. He saw him struggle academically and fall into the drug culture yet felt committed to finding him a school where he would thrive. So he contacted Ruane.

"I said, 'Where can I place this guy' and so I brought him here to the gym," Krumins said. "He worked hard and next thing you know, he started getting close to straight A's, and I started crying because I knew he'd have new friends, a new direction and a purpose in life. He's a legit

Talent and Second Chances

While Ruane revels in unearthing talented players who have been sidetracked along the way, it's not always felonies and misdemeanors that form the roadblocks. Take, for example, Ernest Rouse, a 6-1 junior guard who began his collegiate career as a Harvard University student and Crimson basketball player. Only things didn't exactly go according to plan in Cambridge.

"I failed out," Rouse admitted. "I was a pre-pharmacy student and I didn't fit in at Harvard. I took a leave of absence and got a job working at a rehab clinic in Queens. When I went back to school, I was not able to get back on the team."

Clearly, not everyone is Ivy League material. But Rouse—a graduate of Archbishop Molloy High School in Queens—hardly considers his time in Boston as a failed experiment.

"I don't have any regrets in my journey," he said. "I learned so much my freshman year away from home . . . the little things I saw at Division I, even in practice, that I still bring to the table today and use to help my team."

You can bet Ruane is happy to have him, and his experience, as Rouse is one of the team's top scorers at 15.3 points per game, while ranking as one of the ECC's deadliest outside threats at over 42 percent. Rouse came to Bridgeport prior to last season thanks in part to his cousin, Frank Temple. He contacted talent evaluator Malcolm Williams, whose recommendation found its way to the coach's desk.

"I missed basketball . . . I've been playing since I was four," Rouse said. "I played with the team and it was a hard process at first. There were lots of transfers and it took time to mesh. I really like this team, though. Even when it gets bumpy, we all have the same goal — to make the regional championship. I'd go to war with these guys."

As for the increasingly popular pregame prayer sessions, Rouse says he and other team members have gravitated toward Willie Williams III due to his sheer charisma and talent.

"I'm not crazy religious," Rouse reveals. "But I'm very spiritual and if it is a guiding force, I love that!"

Another player who had something to prove is Kraig Lewis, a 6-4 graduate student who escaped the deadly streets of the South Bronx, where he encountered a vicious brand of jealousy and hatred that manifested itself in the ugliest way. One day, while walking down the street, Lewis was accosted by some neighborhood thugs who were aware of his desire to leave the area. And they weren't about to let that happen without exacting a price.

"Some people wanted to hurt me," Lewis said with a noticeable scar across his kind face, where he was knifed in November 2009, a month before his first child was born. "My son never saw me with my normal face. They tried to stop me. They wanted to hold me back. But God blessed me. I feel like that made me stronger. And now when I see that scar, I feel I'm tough."

Lewis never pursued a college basketball career, fearing he wasn't worthy to be on the court.

Last year, as a senior, he watched the men's team play several times and over the summer, he approached Coach Ruane and summoned the courage to ask for a walk-on spot. When a graduate of Mt. St. Michael's High School in the Bronx such as himself plays for a college team, the school hangs his picture on the wall.

It gave Lewis a mission.

"Coach Mike gave me a second chance," Lewis said.
"It's a breath of fresh air, and other schools wouldn't give you that chance. Thank God for Bridgeport."

Time for a Rematch!

Former men's basketball players prove once a Purple Knight, always a Purple Knight.



(Seated, from left) Steve Wills-Johnston '92, Frank Brown '83, former Head Basketball Coach Bruce Webster, Clarence Gordon '82) joined (back row, from left) Ed Dechendt '89, Joel Teague '91, Lambert Shell '92, and Greg Murphy '90.

Each fall, alumni from the men's basketball team are invited back to campus to for the rematch of their lives.

It doesn't matter that they may have never played together: the game is open to any Purple Knight, regardless of when they played for the University. It also doesn't matter the alumni basketball match is billed as a fun way to reconnect.

"It's a lot of fun, but make no mistake: bragging rights are on the line and the competition is fierce," says Mike Ruane, who currently coaches the men's basketball program.

This year, 30 former players, coaches, and their families attended the event at Hubbell Gym.

- L.G.





William Harrison '12 goes up for two of his game high 23, as Lambert Shell '92 (left) and Larry Hamilton '08 look on.

Soaring High

Continued success for women's volleyball and soccer teams

By Chuck Sadowski

One of the definitions of the word success in the dictionary reads: "the correct or desired result of an attempt." Every fall the Purple Knights' women's volleyball and women's soccer teams exemplify success on the court, in the field, and in the classroom. These two programs shine both on the regional and national levels year in and year out.

On the volleyball court, the 2015 edition of the Purple Knights, under the direction of first-year Head Coach Gary Mullin, tore through the season posting a 26-3 overall record a perfect 16-0 East Coast Conference mark. UB won its third consecutive ECC title, defeating Roberts Wesleyan in the semifinals and LIU Post in the finals of the conference championship tournament held in Hubbell Gymnasium.

Hubbell Gym would again be the place to be just a week later, as Bridgeport, making its seventh straight NCAA Division II Women's Volleyball Championship Tournament appearance, earned the number one seed in the East Region as was selected to host the NCAA Regional for the second consecutive season.

At the 2015 NCAA Division II East Regional, the Purple Knights topped Post University in the quarter-finals and Bentley University in the semifinals before falling to the University of New Haven in four sets in the final. Unfortunately, just six points into the Regional Final, Bridgeport lost graduate student Biljana Savic to an injury.

In 2014, Savic earned her second consecutive East Coast Conference Player of the Year Award, plus she was named the Daktronics East Region Player of the Year and was selected First Team All-ECC for the fourth straight season. Biljana finishes her phenomenal career in Purple and White as the only player in school history to record over 1,000 career kills, assists and digs.

Savic was joined on the 2015 First Team All-East Coast Conference Team by senior Larissa Oliveira and junior Sarah Rosa.

Soccer Success

On the soccer field, the UB women posted an impressive 14-5-2 overall and record and went 5-3-1 in East Coast Conference play. The Purple Knights reached the finals of the ECC Championship Tournament by defeating the host LIU Post Pioneers, 3-1, in the semifinals before falling to Mercy College, 1-0, in the ECC Final.

The NCAA rewarded UB for its fine body of work this season with an at-large bid to the 2014 Division II Women's Soccer Championship Tournament. This season marked Bridgeport's second consecutive trip the NCAA's, and the program's seventh appearance in the national tournament in the last eight years.

In the First Round of the 2014 NCAA Championship, the Purple Knights defeated Philadelphia University, 2-0, to advance to the Second Round to take on fellow ECC member Mercy College. The host Mavericks once again proved to be a thorn in the team's side, as Mercy picked up a 2-1 win. Three of the Purple Knights' five losses in 2014 came against Mercy, and each match was decided by only one goal.

Another highlight of the 2014 women's soccer season came on October 1, when UB defeated Queens College. 1-0, to give alumnus and sixteenth-year Head Coach Magnus Nilerud '99, his 200th career victory as his alma mater's head coach.

(continued on page 42)





Prestigious Awards for UB Student-Athletes

Along with outstanding successes in their athletic endeavors, these two programs also help set the tone for all of the University of Bridgeport athletic programs in academic excellence.

For the fourteenth consecutive season, the women's soccer team has been recognized by the National Soccer Coaches Association of America (NSCAA) with a College Team Academic Award, as the Purple Knights compiled a 3.40 grade point average.

Both programs also can boast of national Capital One National Academic All-Americans as selected by the College Sports Information Directors of America this fall, as women's soccer sophomore Tabea Rauschenberger, a medical laboratory science major with a 3.95 cumulative GPA, was named a Second Team national selection.

Women's volleyball senior Ying Shen earned Third Team national accolades. A three-time American Volleyball Coaches of America All-East Region selection, Shen was named the Most Outstanding Player of this season's East Coast Conference Championship Tournament (she also won award in 2012), as she helped the Purple Knights win their third consecutive conference title and reach the NCAA Division II East Region Championship for the fifth time in six years. She is an accounting major with a 3.95 cumulative grade point average.

The selection of Rauschenberger and Shen to national Capital One Academic All-America teams gives UB an impressive total of six student-athletes earning these prestigious national awards since 2012.

What a Champ!

UB martial arts studies major is a big winner at the World Taekowndo Poomsae Championships.

Edward Jeong, a sophomore Martial Arts Studies major at the University of Bridgeport, has won the bronze medal at the World Taekwondo Poomsae Championships that were held October 30 to November 2 in Mexico.

Last year, Jeong finished seventh in the world.

Martial Arts Studies Program Chairman Dr. Yongbom Kim, called Jeong "a hardworking, exceptional, accomplished athlete and dedicated student."

Taekowndo is in the blood for Jeong.

He began sparring at age 3 with encouragement from his father, taekwondo grandmaster Jae Hyung Jeong. His brother also spars competitively, and his mother recently trained for her black belt.

The World Taekwondo Poomsae Championships are held annually in different locations around the world and are crucial testing grounds for the Olympics. This year, 461 poomsae athletes from 46 countries competed in 36 categories, including eight for freestyle poomsae.

- L.G.



In the last few millennia we have made the most astonishing and unexpected discoveries about the Cosmos and our place within it, explorations that are exhilarating to consider. They remind us that humans have evolved to wonder, that understanding is a joy, that knowledge is prerequisite to survival. I believe our future depends powerfully on how well we understand this Cosmos in which we float like a mote of dust in the morning sky.

— Carl Sagan

Closing Thought: Nurturing the Scientific Imagination

By Amanda Petrus

As a new chemistry professor at the University, I'm excited to become a part of the educational community, teach, and conduct my research that challenges me and has long captured my imagination. I have been very fortunate to have found my career direction relatively early in life, but though it was an early beginning, it was not a smooth one. There was a time when I was intimidated by science. Then, during my sophomore year in high school, I got lucky: I was assigned to a biology class with Mark VanDerwater.

Mr. VanDerwater was (and still is) an excellent teacher. Highly intelligent, approachable, and clear-spoken, he conveyed an excitement for science that got through to me. Sitting in his class at Orchard Park High School in Orchard Park, New York, I perked up as he carefully explained how chemicals send signals in the brain. Being drawn to neurotransmitters was an early hint that I would pursue a career in chemistry. At the time, my brain felt like my greatest enemy, and understanding how it worked seemed like my most powerful tool in overcoming the anxiety that plagued me.

When Mr. VanDerWater noticed my interest, he lent me a book by Carl Sagan called *The Dragons of Eden*, about the evolution of human intelligence. The content was fascinating, the ideas were clearly presented, and Sagan's language was art. I devoured the book, then quickly traded it back in for Sagan's master opus, *Cosmos*. *Cosmos* is a spellbinding history of science, and it produced in me a cognitive Big Bang. My hungry mind began a journey the scale of Dante's, with Sagan as my Virgil.

I then went on to read Richard Feynman, Primo Levi, and other masterly science writers. By the time I applied to colleges I knew chemistry, in some form, would be my career path. There were times when I was tempted to give up; math didn't come easily to me, and I was often plagued by the false idea of not being smart enough. Once again, I had the luck to find talented teachers who could make the complicated elegant and convey a contagious excitement for the subject matter.

There are poets and there are scientists and there are teachers. Because of my experiences as a student, I've come to believe there are also talented individuals who are capable of serving as all three simultaneously. They possess sharp analytical understanding of complicated details and the ability to distill the big picture into elegant descriptions that are graspable by child and expert alike. Most critically, these teachers and writers equip individuals with the desire and knowledge to make informed decisions about a host of complicated topics. In a world where every field is becoming increasingly more specialized, these skills are invaluable.

I had to work hard and overcome my own fears of science, but if it hadn't been for teachers like these and authors like Sagan, I would not be where I am today. As a teacher, I now have an obligation to let my students know they can and must learn. Science belongs to them, too.

Amanda Petrus is a visiting assistant professor of chemistry at UB. She enjoys using research as a teaching tool and still loves to read Carl Sagan.

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