

Reconnect. Reminisce. Relive. REUNION WEEKEND 2017

JUNE 1-4

All Emeritus Classes and the Class of 1967

JUNE 2-4

The Classes of 1972, 1977, 1982, 1987, 1992, 1997, 2002, 2007 & 2012

REUNION WEEKEND 2017 HIGHLIGHTS

Throughout the weekend enjoy campus tours, outdoor recreational activities and Bucknell 360° educational sessions with Bucknell faculty and/or alumni experts.

THURSDAY, JUNE 1

Weekend check-in and on-campus housing open at 1 p.m. for all classes.

- Emeritus Welcome Reception
- Emeritus Classes Reception, Dinner and Social (with special invitation to the Class of 1967)

FRIDAY, JUNE 2

- Alumni Golf Tournament
- Welcome Picnic and Live Music
- Class Decades Party area for each class

SATURDAY, JUNE 3

- Alumni Association Awards Ceremony
- President's Update
- Spirit Parade and Alumni Festival
- Class Reunion Dinners
- Bison Blast and Fireworks
- Jazz Bar

SUNDAY, JUNE 4

- Farewell Brunch
- Worship Services

Registration and complete schedule available in March.



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Colleges Program remains an influential and distinctive experience. Meet the program's architects and some of its outstanding graduates.

By Susan Lindt

President's Message

At the Crossroads



here is an image of Steve Jobs, the late creative visionary behind Apple, that is forever etched in my mind. Gaunt of face and frame, he's standing on stage in his trademark black turtleneck and jeans, gesturing toward the projection of a street sign that marks an intersection. The top sign reads technology; the bottom one reads liberal arts.

That Jobs invoked the liberal arts during his final public speech, just months before his death in 2011, is significant. "I thought it was worth repeating that it's in Apple's DNA that technology alone is not enough — that it's technology married with liberal arts, married with the humanities that yields us the result that makes our heart sing," he told his last audience.

In an interview Jobs gave many years earlier he similarly espoused the liberal-artsmeets-tech philosophy of his company.

"Part of what made the Macintosh great was that the people working on it were musicians and poets and artists and zoologists and historians who also happened to be the best computer scientists in the world. We all brought to this effort a very liberal arts attitude that we wanted to pull in the best that we saw in these other fields into this field. I don't think you get that if you are very narrow." In fact, it was his study of calligraphy at Reed College that Jobs credits for the beautiful typography he designed for the first Mac. "It was beautiful, historical, artistically subtle in a way that science can't capture, and I found it fascinating," he said.

Examples of Job's philosophy are readily apparent at Bucknell today, as new trustee David Feinberg, president and CEO of Geisinger Health System, pointed out during his first Board of Trustees meeting this fall. "To study at an institution such as Bucknell is to hone the skills that you need to succeed in life, regardless of how you define that success. We can teach the science in medical school, but give me the students who can think critically and communicate well."

At Bucknell we offer an educational experience in ways that often transcend the classic definition of a liberal arts institution. For instance, in addition to our College of Arts & Sciences, we offer robust engineering and management programs; our size affords our students the resources of a larger university, but in an intimate, residential-learning environment; and our athletics program comprises 27 Division I teams. This distinctive opportunity for a liberal learning experience is the essence of Bucknell, as indicated in our mission statement, which reads in part: "Bucknell is a unique national university where liberal arts and professional programs complement each other. Bucknell educates students for a lifetime of critical thinking and strong leadership characterized by continued intellectual exploration, creativity and imagination."

Life is animated by this kind of rich, broad learning. It makes for better employees and in the long run — and more importantly — more interested and interesting people. 'ray Bucknell.

John Bravman PRESIDENT



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Published by Bucknell University, One Dent Drive, Lewisburg, PA 17837 570-577-3611 and printed by Progress Printing in Lynchburg, Va., an FSC-certified printer.

Bucknell Magazine (USPS 068-880, ISSN 1044-7563, Vol. 10, Issue 1), copyright 2017, is published four times a year in the winter, spring, summer and fall, and is mailed without charge to alumni, parents, students, faculty, staff and friends of Bucknell University.

> Periodicals postage paid at Lewisburg, PA 17837 and at additional entry offices.

CIRCULATION

57,000. Address all correspondence to bmagazine@bucknell.edu.

POSTMASTER

Send all address changes to: Office of Records, 301 Market St., Suite 2 Bucknell University, Lewisburg, PA 17837

Please recycle after use.

Letters

APPROACH TO POLITICAL REFORM SHOULD BE MORE COMPLEX

I live in Europe and cannot fail to respond to some of the comments made by Chris Shadek '17 in his essay, "Vote for Change," which appeared in the Fall 2016 issue. Mr. Shadek's very first sentence made my heart sink, namely that U.S. presidential elections "[set] America apart from other nations." Does he not realize that there are dozens and dozens of nations that hold regular elections and that those of Canada — the United States' nearest neighbor — and Western Europe are (and have long been) among the fairest in the world? Does no one at Bucknell explain that such myths of "American exceptionalism" are just that?

A later observation that "our system of government is broken and ineffective" cannot be disputed. But Mr. Shadek's solution is to "elect a different type of leader." While this might be a good start, the president is just one part of the government; a more thoughtful solution would be to put limits on Congressional terms and to stop gerrymandering. If the issues of political reform are put in such simplistic terms, it will be impossible to hold a meaningful debate about solutions.

> Eleanor Heine '71 London, England

LIFE WITH NORMAN THE DOG (AND HIS LEGENDARY NAMESAKE)

I read with great interest the article on Page 25 of the fall issue of Bucknell Magazine, about Norman Thomas, Class of 1905. For the last 18 years I have lived in the home he and his wife, Violet, built in the 1920s as their summer home, in Cold Spring Harbor, N.Y. The house ultimately became the year-round residence for his daughter, Francis Thomas Gates, and her family, until 1965. Members of their family remain in this area, and Norman's daughter, Francis, was a tremendous force in civic and church affairs in our community. She passed away last year, just shy of her 100th birthday.

The house is a very well-recognized home in our community. Norman Thomas designed the large dining room, with a wrap-around balcony, employing the vision and expectation that he would speak to his constituents/guests from the balcony into the great hall. [Thomas was the six-time Socialist candidate for president.]

The Thomases grew apples and had dog-breeding kennels on the property as well. In fact, our dog is named Norman! This home is very much a Bucknell home, as my beloved black Labrador retriever spent a great deal of time on campus with my sons, Andrew '12 and Erik '15.

> Kirsten Schubauer Heinemann '81 Cold Spring Harbor, N.Y.

MUSLIM STUDENT'S ESSAY WAS INSIGHTFUL. INSTRUCTIVE

I see many derogatory anti-Muslim messages sent my way via email and know that the vast majority of this correspondence is laced with paranoiac fear and prejudice. As much as I generally stay clear of commenting on this subject, I found the one-page article "Seeing the True Islam" in the fall issue of Bucknell Magazine to be so very insightful and instructive! I can now better understand how hundreds of thousands of our fellow citizens, male and female, must feel. This article, written by an American-born Muslim, Kabir Uddin '19, is perhaps the best article on the subject I have ever read. My heart goes out to Kabir and all of the other peace-loving Muslims who are citizens of our country. Let's hope that prejudice for minorities, including Muslims, will be replaced by a serious national dialogue resulting in true equality for all, irrespective of gender, ethnicity, race, religion or orientation.

> Howard Kendall '69 Sudbury, Mass.

MORE LETTERPRESS LORE

I couldn't stop smiling when I read Eric Riess '71's letter in your fall edition about the summer article on metal type and letterpress printing. I smiled because I intended to write almost precisely the same letter, because his letter rekindled incredibly fond memories of working with terrific student writers and editors 40-odd years ago, and because both the original article and Eric's letter brought back memories of working on The Bucknellian at Focht Printing on Market Street.

The print shop was old. By the 1960s the days of linotype and sheet-fed printing presses were almost over. The skilled craftsmen (not many women were doing this work) were about to be replaced by any kid who took a high-school typing class and bought an electric typewriter. And computers would make typewriters look as antique as linotype machines only a few years later. My first journalism job was at a paper switching from manual typewriters to computers (skipping electric typewriters altogether). The pain felt by experienced journalists and linotypists who understood their days were numbered was palpable.

Eric correctly remembers that the print shop largely was Art Miller's domain by the time we were at Bucknell, but I should add a note about Brown Focht '28, who was still hard at work in "his" shop when I graduated. He had inherited the printing trade from his father, who learned it as a teenage apprentice before going on to found Lewisburg's weekly newspaper and to represent Union County in the state legislature and in Congress. Focht Printing was a long-term leader in Lewisburg's development.

I learned so much during my four years at Bucknell. The rare opportunity to get to know and learn about working together and good citizenship in a community — from the men at Focht Printing added an extra dimension to it all.

> Robert Feir '69 Estero, Fla.

IMOTHY SOFRANKO

Moore Avenue

News&Notes

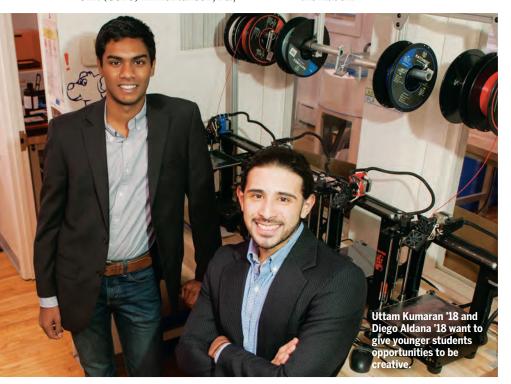
Refining a Dream

Engineering students' business startup provides tech options for local schools

By Matt Hughes

n October 2015, **Diego Aldana '18** and **Uttam Kumaran '18** entered BizPitch, Bucknell's annual
Business Pitch Competition. Their concept was a
consulting firm that helps elementary and high
schools build makerspaces: centers that provide
tools, such as 3-D printers and vinyl cutters, that quickly
create manufactured works.

The pair failed to move beyond the competition's first round, but they didn't give up on their idea. A year later, the Central Susquehanna Intermediate Unit (CSIU) in Montandon, Pa., celebrated the opening of a makerspace, conceived by the students, which will be a model for the 17 school districts the unit serves. Aldana and Kumaran cut the ribbon.



Aldana and Kumaran say the consulting firm they founded, Maker EDU, was born in their unsuccessful BizPitch bid. Preparing for the contest helped them flesh out their idea, and participating introduced them to Business Consultant Dennis Hummer of the Bucknell Small Business Development Center (SBDC), who encouraged them to partner with the center to develop their idea into a company.

For the next year, Hummer and the SBDC helped the engineering students refine their concept via the Bucknell University Entrepreneurs Incubator and to connect with CSIU, their first client. Maker EDU helps schools determine what sort of makerspaces they want, provides cost estimates and orders equipment. The partners also offer training to help educators use their space effectively and help write grants to finance makerspaces. As students, Aldana and Kumaran say they've learned how to effectively employ makerspace tools in an educational setting.

"Coming up in high school and middle school, we know what we wish we had," Kumaran says. "A lot of times it's hard for teachers to gain that perspective, because by the time a student can express to you what he needed, he's long gone."

They also bring experience from their work with Bucknell's makerspaces, especially the 7th Street Studio Makerspace, which Aldana helped create. Aldana was introduced to 3-D printing by a teacher at his Boston high school and was instantly captivated, but his school didn't have a printer for

him to use. Upon arriving at Bucknell, one of the first things he did was seek out 3-D printers. On his hunt he met Professor Nate Siegel, mechanical engineering, who invited him to serve on the committee that designed the makerspace.

Aldana jumped at the opportunity and was able to remain on campus the following summer through a grant from the Reed Garman Engineering Entrepreneurship Fund, which required him to tweak his makerspace idea into a business framework. It planted the seed that would become Maker EDU and provided experience he put to use in designing the CSIU makerspace.

Jeff Kay, the makerspace project coordinator for CSIU, says the intermediate unit "let [Aldana and Kumaran] lead" their first project. "We had seen makerspaces, but we didn't know how to start one," Kay says.

CSIU expects its new makerspace will be used by area school children for field trips and summer camps and as a demonstration site for how school districts might employ their own makerspaces.

While they don't have another client yet, Aldana and Kumaran say they've had positive feedback from the

school districts CSIU serves and are anticipating their next project.

"We've tried not to look that far ahead, because if you start looking that far, you get lost," Aldana says. "But it's definitely something I want to continue doing, because giving students this opportunity is amazing. This work is really rewarding, not just in the sense that we're making money; we're making a difference as well."

To read more about 3-D printing at Bucknell, go to bucknell.edu/Bucknell-3D.

Opportunities Multiply for Women

If you're determined to discover the percentage of women who earn undergraduate degrees in computer science, be prepared for disappointment. Less than 20 percent do so, according to a 2016 report by the National Science Foundation. (Among Bucknell students, the statistic is closer to 25 percent.) This disparity leaves much room for improvement, according to Anushikha Sharma '18, co-founder of a new group dedicated to the educational and professional advancement of women studying computer science. "Our goal is to keep women in computer science," says Sharma, who started the University's chapter of the Association of Computing Machinery-Women (ACM-W) last spring with Laura Poulton '18.



Sharma explains that introductory computer science classes often have more women enrolled than advanced classes, as many women eventually leave the program. "We're hoping that through this organization women can find a place to talk about issues such as these," Sharma says.

Fifteen members of Bucknell's ACM-W had the opportunity to attend the annual Grace Hopper Celebration of Women in Computing, the world's largest gathering of women technologists, which was held this October in Houston. The conference not only showcases the contributions of women technologists but provides networking opportunities for attendees. Funding from Bucknell Student Government, as well as the colleges of engineering and arts & sciences and the computer science and electrical & computer engineering departments, enabled Bucknell students to attend.

"Being involved in ACM-W and attending Grace Hopper has given me confidence," says Poulton, who experienced the inspirational power of seeing firsthand the progress that can be made for women in the computer science field.

Tongyu Yang '18 appreciates the new organization's ability to forge connections among students from different class years within the major. "It's cool to see first-year and sophomore women interact more," Yang says.

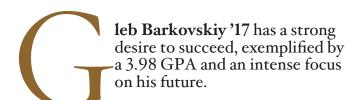
The chapter's future goals include developing a mentoring program and hosting events to foster increased involvement in the organization.

Sierra Magnotta '18 feels the new group is empowering. "It's impactful to see my value, to be told 'we want you,' and to no longer see myself as competing with people and not measuring up," she says. — Samantha Nolle '20

From St. Petersburg to Lewisburg

Bucknell studies provide foundation for aspiring Wall Street financier from Russia

By Erica L. Shames



"My work ethic keeps me afloat," says Barkovskiy, who lived in St. Petersburg, Russia, until age 11. "The United States gave me an opportunity, and I'd be foolish not to commit my heart to make things happen."

In 2007, a charity component of North Broward Prep in Boca Raton, Fla., sought to educate smart, underprivileged children and sponsored Barkovskiy's move to the United States. The program was canceled a year later, but Barkovskiy was awarded a scholarship to continue his schooling there.

One advocate for Barkovskiy was Eric Wilson, teacher and house parent at the residential school where Barkovskiy lived. Wilson founded RenProject to attract private funding to secure Barkovskiy's and the other children's futures.

"I worked hard to provide this opportunity for as many of the boys as possible, including finding them a new school [Academy at the Lakes in Tampa], taking on the role of father and putting them up in my home," says Wilson.

Although Barkovskiy's list of college applications was long, it wasn't until his guidance counselor shared his story with Bucknell's former Assistant Director of Admissions Lana Bird that he found the right fit. Bird encouraged Barkovskiy to apply early decision, and

he was given a full scholarship.

"We knew if he was going to go to school in the U.S., he'd need as much financial aid as possible," says Wilson. "He is on a student visa and isn't eligible for in-state tuition or financial aid."

Barkovskiy's mother, Lyudmila, who remains in Russia with his father, remarks, "My son is enrolled in one of the best universities in America, thanks to his perseverance, work, determination and will. I'm a happy mom!"

As president of Alpha Lambda Delta academic honor society and treasurer of the Russian Club, Barkovskiy admits he would have liked to explore other aspects of the Bucknell experience, such as being part of the Greek community or traveling abroad, yet understands his priorities must support his long-term career goals.

"People ask me, 'When do you have fun?' Maybe it's not healthy, but I know what I want and what it will take to get there," he says.

Hoping to eventually land a job on Wall Street, Barkovskiy enrolled in relevant finance courses outside his economics major, such as Corporate Finance, Investments and Investment Banking. The latter course especially fueled his interest in capital markets, since it offered readings about the history of Wall Street and captivating

stories of financiers.

As a result, "I have this image of these men, well dressed and polished — men of confidence and respect," he says. "When I was deciding on a profession, the idea of becoming a financier stuck deeply with me. My image is not of Gordon Gekko, of course, but someone like J.P. Morgan."

His internship last summer with Goldman Sachs was another step toward his goal. After graduation in May, he will have less than a year to find a job before his visa expires. He is quite concerned, he says, about what will happen but is inspired by those who have persevered.

"The United States is all about working hard toward your dream, and there are tons of success stories — think Michael Jordan or Walt Disney," Barkovskiy says. "Their stories help me stay motivated."

Wilson sees Barkovskiy's own story as the quintessential against-all-odds tale.

"Those of us in Florida who supported Gleb when he was a kid are very proud of him," he says. "I can't help but feel Bucknell folks might feel the same, knowing their gifts and their school changed his life."

Erica L. Shames is founder and publisher of Susquehanna Life magazine, and a freelance writer.







Cheryl Barton '68 is an internationally known leader in the shift toward resilient futures through landscape architecture and green urbanism. Barton heads up an eponymous 10-person urban planning and design firm in San Francisco. She is a fellow of the American Academy in Rome and fellow and past president of the American Society of Landscape Architects.

You grew up in Erie, Pa. Did your proximity to the environment surrounding Lake Erie influence your decision to pursue landscape architecture?

The deterioration of Lake Erie greatly informed my career trajectory. At an early age I understood that humans were dangerously out of sync with their habitat, and that the quality of environments and places has a profound effect on people. I felt compelled to intervene.

How did your time at Bucknell help develop that need to intervene?

At Bucknell, I majored in fine arts, with an informal minor in geology. I saw the work of the environmental artists, Robert Smithson, Robert Irwin and others, who were interacting with the landscape in ways that made it more visible. It was not just art; it was something more. They brought attention to the environment. That integration of art and science was critical for me.

It sounds like a formative time.

It was. During my senior year, I saw the work of Dan Kiley in a 20th-century architecture class and attended a lecture by Ian McHarg. These were the first times I heard the expression "landscape architect." It was eye-opening. In different ways, their work focused people's attention on the landscape and inspired greater environmental stewardship — that really spoke to me.

Can you talk about your design philosophy and how it relates to environmental responsibility?

We're at a tipping point as a planet, and we can deal with that as an art, or as science, or one can combine the two perspectives — which is what I do. I am interested in going beyond sustainable to resilient. Sustainable infers holding our own. Resilient means doing something to make a site, a landscape or the planet more resilient to whatever changes the Anthropocene Era brings to us. Sustaining beauty — the art and design of it all - is fundamental to engaging humans in seeing and caring about place.

Could you name a few projects that stand out as favorites?

The South Lawn at the University of Virginia, a contemporary version of Thomas Jefferson's thinking

about landscape. A scrappy little park in Portland, Ore., called The Fields. It had a very low budget and a very simple design, yet it has become the front yard for The Pearl neighborhood. The Faculty Terrace at Stanford Law School that has been voted one of the best places on campus. We're currently working on a self-supporting ecodistrict in Reno, Nev. A four-block area of the city will have its own urban forest, wastewater treatment and energy systems. It's a model for how cities can adapt to the future.

Can you tell me about where you live?

I live in an urban observatory a modernist flat high above the street in downtown San Francisco. The view encompasses a landscape panorama from southeast to northwest. It is open to the sky, the bay and the city and overlooks a park. We experience climate patterns and urban street life simultaneously. On a daily basis I'm immersed in the landscape where I work.

To see photos of some of Barton's favorite projects, check out the Bucknell Magazine app or go to bucknell. edu/Barton.

Homecoming 2016















Homecoming highlights, Oct. 21–23, included anniversary nods to the Residential College Program's 30th and *The Bucknellian's* 120th. To see more photos from Homecoming go to bucknell.edu/Homecoming.



GORDON WENZEL AND TIMOTHY SOFRANKO



An Uncommon Hour

Local history and luminaries are illuminated during first-year students' cemetery stroll

By Sherri Kimmel

Tell in advance of Halloween this fall, about 55 first-year students found themselves strolling the Lewisburg Cemetery in a tour led by the Rev. John Colatch.

This was the third time Colatch, University chaplain and director of religious life, has taught his course Don't Fear the Reaper: Death and Dying in America. The cemetery tour is one of the capstone experiences for a course that aims to acquaint students with ways in which Americans view and react to the subject of death and to help them feel more comfortable addressing what is often a disturbing topic.

For the first time this year, the course served as one of four foundation seminars for the Society & Technology Residential College, and the tour was offered to all students in that college as one of its weekly common hours.

Among the 30 stops Colatch made around the cemetery at the corner of 7th and St. George streets was the more than 200-year-old "witness tree, so called because it was among trees listed on the original map showing the layout of the borough, and it is the only tree surviving from that time," Colatch says. "This is where the town was laid out [in 1785]. Before it was called Lewisburg, it was known as Derr Town."

The cemetery, he notes, followed the town's formation by about 60 years. The remains from Lewisburg's first graveyards, at Market, Third and Fifth streets, were eventually moved to the current site, which was opened in 1848, according to the Lewisburg Cemetery Association.

Along the curving sylvan paths through the graves Colatch points out the plot of the town founders, the Derrs, as well as the resting places of notable Bucknell families, such as the Rookes, two of whom lived to age 103. Early presidents also found their rest here: Justin Rolph Loomis, John Howard Harris and Emory William Hunt.

"A lot of people who worked at Bucknell decided to stay here permanently," Colatch says with a smile.

Another notable Bucknell grave highlighted was that of Christy Mathewson, Class of 1902, a New York Giants pitcher who was elected to the first class of the Baseball Hall of Fame and who died at age 45 from exposure to chemical weapons during his service in World War I.

Taking a tour of the cemetery is a good way "to learn a lot about the town and how people show respect," Colatch says. "It also shows you that, years ago, people didn't live long."

While touching on early architectural motifs — angels and obelisks — Colatch gestures toward more contemporary tombstones, "some of which photographically illustrate passions and hobbies of individuals, even hobbies that may have played a role in their deaths."

Although photographic images occasionally were engraved on tombstones, "even back to the 1800s," he says, doing so is fairly common today.

Colatch left the students with a sobering thought on a sunny day: "What would you like your tombstone to say?"

SHORT STACK

Engineering Dean Patrick
Mather was awarded part
of a \$360,000 grant from the
National Science Foundation to
research "smart" biomaterials,
which could help worn-out
human tissue and even organs
grow back. Mather and his
collaborators at Syracuse
University are developing
polymer scaffolds that respond
to enzymatic actions of cells and
to light, which can be seeded
with stem cells and then break
down as tissue regenerates.

In October, Bucknell played home to the world premiere of *Proserpina*, a little-known opera by Johann Wolfgang von Goethe and Karl von Seckendorff last performed in 1778. Professor Annie Randall, professor of music, found a handwritten score of the piece in a German archive during the 1990s and worked with composer Paul Botelho, music, to develop an opera around it, combining solo voice, orchestra, choir and electroacoustic elements.

An assemblage of fossils and Devonian-period rock being studied by Professor Jeff Trop, geology, and a colleague at Lycoming College contains one of the oldest tetrapod fossils ever found. Devonian tetrapods were the first fish to develop fingers, an evolution that eventually led to amphibians and all other land vertebrates. The fossils were exposed during a highway widening project about 35 miles from Bucknell.

'Energy Hill' is Growing

Self-sustaining, 'green' geodesic dome to become a model of sustainable design

By Matt Hughes

t the highest point on campus, students, faculty and staff are building a beacon to guide the way toward a more sustainable future.

The spot, which Bucknell's Center for Sustainability & the Environment (BCSE) has dubbed "Energy Hill," already contains a 900-watt wind turbine and a 9-kilowatt array of solar panels, a gift of the Class of 2014. Now, an interdisciplinary team of students, professors and University staff is at work on a new addition: a greenhouse built using the most stringent standards for sustainable construction.

The structure — a geodesic dome 26 feet in diameter and 13 feet high at center — is inspired by the Living Building Challenge, a certification metric for green construction that demands, among other requirements,

that all water and energy consumed by the building be collected and generated on site, without the use of combustion. The drivers of the greenhouse project hope it will not only provide an example of what is possible in sustainable design and construction but will also offer opportunities for students to interact with green technologies through research and design projects.

Some of that work took place in spring 2016 — before the greenhouse was even erected — when Professor Nate Siegel, mechanical engineering, asked students in his Heat Transfer course to design a compost-based heating system, which harnesses the heat generated as microbes break down organic matter.

This spring, Siegel plans to enlist his Solar Energy Technologies students in creating power solutions

for the greenhouse. They will join students designing a rainwater collection system under the guidance of Professor Mike Toole '83, civil & environmental engineering, and senior design students advised by Professor Tom DiStefano, civil & environmental engineering.

DiStefano's students are constructing an anaerobic digester, a device that uses food waste to produce methane fuel, for the site. Siegel also foresees research into low-cost energy storage solutions for the developing world — an initiative supported by **Herb Wilcox** '50 — occurring at the greenhouse.

When complete, organizers envision the greenhouse will provide further opportunities for student and faculty research, following a path blazed by the green roof of the Dana Engineering Building and the garden at the BCSE.



Swirling through Class

Students learn respect for all that's vine in new viticulture course

By Heather Peavey Johns

rofessor Gary Grant studiously swirls the contents of his glass. Red liquid slides up the sides and nearly to the rim. He lets it settle, then pushes his nose deep inside and inhales.

Grant's eyes are open, but he doesn't appear to see the ELC Center Room, or the rows of cloth-covered tables scattered with stemware - or even his students, watching him with pens poised over stained and battered notebooks.

He places the glass on the table, smiles and nods. This is a good wine.

According to Grant, appreciating wine is about respect. Grant is teaching that respect to a group of Bucknell students aged 21 and older, the first to take the new course From Vine to Wine: An Introduction to Viticulture and Oenology.

Learning about wine is no different than learning about any other subject. Students need to pay attention, to read, to listen. They need to have patience. They need to understand that what they see isn't the only story being told.

"To understand what it takes to

make a bottle of wine, you should really spend some time thinking about it and considering what you are experiencing," explains Grant, a theatre & dance professor who is certified by the Society of Wine Educators. "You begin to appreciate what a vintner in Argentina goes through as opposed to what a vintner in Napa Valley goes through, and how they understand their land, their vineyards and their traditions of winemaking."

The students attend weekly tastings lasting up to three hours with special guests, such as Chuck Zaleski '83, co-owner of Lewisburg's Fero Vineyards and Winery, and record their experiences in a wine-tasting notebook. Students are required to spit out the wine to keep their senses sharp.

From Vine to Wine exams are fairly typical — essays, true/false, multiple choice, fill-in-the-blanks - but with a twist: Students have to identify a mystery wine.

"We were allowed to have our tasting notebooks to jog our memories about aromas and taste profiles," says Emily Fischer '17, a theatre major. "We took



our best guess and had to justify it. I guessed merlot — I don't know if I'm right yet."

Back in the ELC Center Room, the exacting and emotional language tumbling off the tasters' tongues grows louder with each pour. "Long in the mouth." "Passionate." "Young and rugged." "Racy." "Rich." "Earthy." "Beautiful."

Grant stands in the center of it all, listening, watching, swirling his glass and smiling.

Read an extended version of this story and learn Grant's criteria for what makes a fine wine in the Bucknell Magazine app or at bucknell.edu/VineToWine.

Bucknell in the News

HIDDEN BLACK HOLES

Business Insider described a study led by Professor Jack Gallimore, astronomy, that reshapes science's understanding of the supermassive black holes lurking at the centers of galaxies. By making observations with the Atacama Large Millimeter/ submillimeter Array in Chile, Gallimore and his co-investigators were able to better understand relationships between the black holes and the discs of cosmic debris surrounding them.

A HIGHER BAR FOR **CANADA**

Professor Anthony Stewart, English, the author of Visitor: My Life in Canada, shared insights about racial discrimination in his home country with Toronto newspaper The Globe and Mail. "If the national narrative is based on that there aren't as many lynchings in Canada, or police shootings in Canada — the national narrative needs to set its bar higher," Stewart said.

FUZZY OIL AND GAS MATH

CNBC sought Professor Thomas Kinnaman's appraisal of drillingindustry employment projections touted by Donald Trump during his presidential campaign. Kinnaman, economics, critiqued the projection model the Institute for Energy Research used in the economicimpact report and noted that the report makes no attempt to weigh environmental and social costs with economic gains.

(See more at bucknell.edu/bitn)

BIOLOGIC BAR CODES

Scientific American quoted Professor DeeAnn Reeder, biology, about the scientific trend of DNA bar coding, a computerized taxonomic method that identifies a genetic profile from a small portion of an organism's DNA, then assigns the species an index number. Reeder said DNA bar codes are useful for assessing the big picture of biodiversity but create problems at the species level.

Research&Inquiry

Parsing the Political

Jennifer Thomson examines how radical movements of the 1960s have evolved

By Paula Franken

rofessor Jennifer Thomson, history, studies the relationship between American political culture and environmental politics in the 20th century. She is particularly interested in how competing conceptions of health came to structure the landscape of American environmental politics in the post-World War II period. What she discovered is that environmentalists' ideas about health, while deeply influenced by established science, were equally shaped by the radical health activism of African-American, feminist and gay communities, in particular the connections these communities drew between health, marginalization and political power.

Thomson also explores how environmentalism survived the economic and political transformations of the 1970s, in particular, the waning of mass mobilizations against racism, imperialism and patriarchy. Environmentalists' tactics and ideas persisted and evolved, finding new outlets in organizations and events such as bioregional watershed councils and Earth First! blockades. Thomson studies the compromises environmentalists made to remain politically relevant, as well as American political culture in a broader sense.

Thomson hopes her students will connect the 20th-century history of structural inequality in the United States with collective political possibilities today. Her discussionbased courses include Radicals and Reformers, which examines grassroots movements of the 1960s and '70s such as the Black Panther Party for Self Defense, Students for a Democratic Society, the Student Nonviolent Coordinating Committee and women's liberationists. She encourages her students to articulate their positions, debate issues and use course material to design a political intervention on the Bucknell campus.

"I want them to draw on the history of the United States to understand what's happening around them in the world today," she says. "I also want them to understand how marginalized groups can band together and make a difference. That's how change happens."

FACULTY PROFILE Carl Lin

In 1999, Professor Carl Lin, economics, was an army platoon leader on Kinmen, an island of his native Taiwan about a mile from mainland China. It was a time of heightened military tension in the area, and Lin, who had developed an interest in the Chinese economy as an undergraduate in Taipei, wanted to know more about the complicated Cross-Strait relations between China and Taiwan.

"China has experienced rapid institutional changes and achieved remarkable economic growth since the country announced reform in 1978," says Lin, whose research in applied microeconomics and labor economics focuses on immigration, minimum wages and China's economy. "It is necessary for everyone concerned with the development of the world to better understand the Chinese economy."

Lin studies the effect that public policy has on employees

and employer welfare. "Most research on the impact of immigration has focused on the consequences for employees as measured by wages and employment," he says. "But we lack answers to questions concerning the quantitative impact of immigrants on employer profits."



Changes in China's minimum wage may put its abundant low-paid occupations at risk, Lin says. "The Chinese minimum-wage policy has had both positive and negative impacts on workers, which shows the importance of rigorous research to inform policy making." - Rhonda Miller



Bucknell Student Life&Sports

Pedaling Success

Club cyclists climb the hills of Union County to national prominence

By William Bowman

ithout the public recognition of a varsity sport, Bucknell's cycling club succeeds on two distinct levels: developing the sport at the University and competing at the highest level of collegiate cycling.

Last spring, the student-run team qualified two athletes for the Collegiate Cycling Nationals: Alex Breakstone '17, past club president, and Evelyn Korbich '19, current vice president. A three-time Collegiate Nationals qualifier, Breakstone says his goal is to bring more riders to the national event in Colorado this May.

"We hope to have some of the lessexperienced members compete in the Team Time Trial event," Breakstone says of the race that would require the majority of the club to complete a timed team event. "Bucknell has not entered a team in the event since the mid-2000s, and I believe that we can bring competitive teams for the men's and women's categories."

The club used the fall semester to increase its membership and its endurance to prepare for the more competitive spring season. A member of the Eastern Collegiate Cycling Conference, considered the most competitive in the nation, Bucknell's cycling club — which started in the early 1970s — has grown from fewer than 10 members when Breakstone arrived in 2013 to more than 20 now, including a half-dozen women.

"I hope to see success among our new riders as they grow into the sport, increasing their confidence," Breakstone says. "I also hope to help the younger members transition to being able to run and grow the club."

Club adviser Ron Marquette admires the dedicated studentathletes, who balance a busy academic schedule, competitions and practice while also managing the team.

"They plan their own travel to races, book hotels, design and order their own team uniforms and manage the team's budget," says Marquette, senior assistant director of the annual fund.

He notes that a community has formed in and around Bucknell cycling — including alumni, families of cyclists, faculty and even local residents — which adds to the success of the program off the road.



Campus Fun in Focus



From left: Rory Bonner '17, Joey Krulock '17 and Vincent Favia '16.

f a glimpse of Bucknell beauty in your social media feeds has recently sparked a bout of nostalgia, you can thank Bucknell Student Social Media Team members Joey Krulock '17 and Rory Bonner '17. These management majors and members of the Bison wrestling team have a passion for video production that has fueled their creative contributions to the University's Division of Communications since summer 2015.

The duo — which was a trio until Vincent Favia '16 graduated specializes in short, entertaining videos that showcase the campus through the eyes of students. Krulock starred in the video that launched the @iamraybucknell Instagram account in August 2015, as well as one that revealed how you know it's finals week at Bucknell (hint: there's crying involved).

They've filmed move-in day and therapy-dog sessions, and even spooked the campus with a scream-tastic Halloween video. For an April Fool's video prank, the team worked with Dining Services to convince students that the popular Flying Bison food truck was closing. On the docket this fall were more campus beauty videos, as well as one featuring the popular turkey feast known as "Cafsgiving." — Heather Peavey Johns

See their work in the Bucknell Student Social Media Team playlist at youtube.com/ watchbucknell, watchbucknell.edu/cafsgiving and in the Bucknell Magazine app.



STUDENT PROFILE James Richardson'17

After studying Latin for eight years, from elementary school through high school, James Richardson '17 had no interest in pursuing the subject at Bucknell. However, after taking a Roman Civilization class his first year, he quickly changed his mind.

Richardson appreciated reading different viewpoints and connecting the ancient and modern worlds. "I found it interesting how much our society has changed but also how much we have stayed the same," Richardson says. He believes his classics & ancient Mediterranean studies major has helped him prepare for the world outside of Bucknell, as he is now better at writing and proposing provocative arguments.

Richardson's love for the discipline led him this summer to create a classically inspired video game called *The Lost Brother*. His on-campus work was funded by the classics department. Under the leadership of Visiting Professor Tom Beasley, classics & ancient Mediterranean studies, Richardson based the game on a story from *The Aeneid*. He learned basic programming and how to create a narrative and plot. Fall semester, an independent study with Professor Beasley allowed him to continue developing the game, with an end-of-semester goal of "having a playable level of the game."

Richardson also is a campus leader — president and founder of the Inter-Residential Hall Association, an organization that works to build a sense of community among different residential halls on campus. He also was a firstyear orientation coordinator.

"I have a passion for making people feel welcome, and I love working with a team," he explains. After graduation, the Brooklyn native plans to return to New York to "work in the video-game industry and eventually lead a team in creating the story side of games," he says. - Lauren Repke '19

gacles Gifts&Giving

A World of Possibilities

Access to off-campus study programs bolstered by scholarship funds

By Patrick Broadwater

ff-campus study and global learning opportunities, such as service-learning trips, are often life-changing experiences for students. Traveling to new locales exposes students to different cultures, foods, languages, customs and ways of thinking, helping to reshape their perspectives about a host country, as well as casting a new light on their own lives.

One Bucknell student who clearly benefited from the opportunity is Nathand Carter '19, who attended a summer travel course in Kyoto, Japan, thanks to an East Asian studies scholarship.

Carter, a Los Angeles native, has had a passion for discovering cultures different from his own since he visited Ecuador as a high-school junior. Whether he's crossing the United States to attend Bucknell, exploring New York City or interviewing residents on the streets of Kyoto as he did last May, Carter is happiest in uncomfortable and unfamiliar

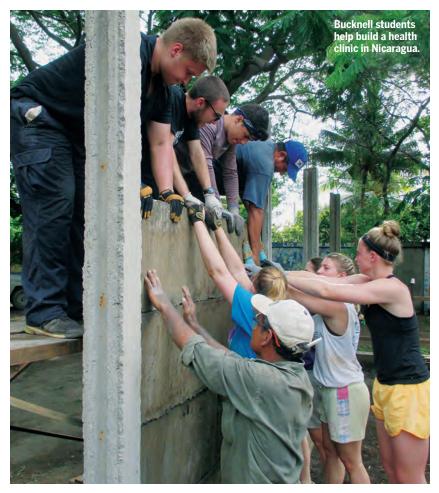
surroundings.

"It was definitely worth it," Carter says. "There are so many different experiences that you can imagine and conceptualize in the abstract, but you really only solidify your understanding of them by doing and being in a different place. I really wish all Bucknell students could go and experience the same thing.'

After a one-week crash course on contemporary Japanese culture and environmental sustainability, Carter and seven other Bucknell students spent two weeks exploring Kyoto and Hiroshima. Paired with conversation partners from Doshisha University, they visited cultural and historic sites, spoke with environmental conservationists and interviewed people they met on the street.

Students at Bucknell, and nationwide, are taking advantage of overseas study in record numbers. More than 300,000 students participated in a study-abroad experience in 2013-14, an increase of 5 percent over the previous year, according to the 2015 Open Doors Report on International Educational Exchange. Nationally, about 10 percent of students participate in a study-abroad program before





graduation, a figure that has tripled in the past two decades.

At Bucknell, about 45 percent of students study abroad, according to figures from the Office of Global & Off-Campus Education. And, through the WE DO Campaign, the University has been striving to make global opportunities possible for more students who otherwise wouldn't have the means, raising more than \$2 million so far.

Steve '85 and Lana Franks Harber '85, for instance, fund an annual East Asian studies scholarship, while an endowed gift from Donald '77 and Pamela Heller Shassian '78, via the Shassian Family Fund for International Service Learning, enables need-based support for service-learning courses in Cape Town, South Africa, and Ciudad Sandino, near Managua, Nicaragua.

"We want to ensure that financial access is never the stumbling block for a student who wants to go abroad," says Provost Barbara Altmann. She notes that her own study-abroad experience helped her understand French and European history in a way that otherwise would not have been possible. "It's critical that there be equitable access for all of our students for programs of this kind," she says.

Depending on the destination, a three-week course, such as the trip to Kyoto that Carter participated in last year, could require nearly \$6,500 per student beyond tuition for travel, course fees, food and lodging. Summer travel courses could approach \$9,000 in costs.

"Trips like these can be prohibitively expensive," says Professor Elizabeth Armstrong, East Asian studies, who co-led the Kyoto trip with Professor Mizuki Takahashi,

"I'm delighted to say that donations from our generous donors were

tagged for students who specifically applied for summer programs, and we were able to give funding to five of the eight students," Armstrong says. "Somebody went out of their way to subsidize their learning activities. And students took it seriously and made the best use of the funds. The experience gave them fulfillment not only as students but also as human beings."

Funding global study for all students through generous donations is about fairness, says Professor Paul Susman, geography and Latin American studies, who has led a three-week summer service-learning course to Nicaragua seven times since 2005. "All Bucknell students should have the same range of experience available to them. It's the best teaching and learning environment I've ever been in. We shouldn't limit the opportunities to take advantage of a Bucknell education and its fullness."

Scholarship support has helped to open access to the Nicaragua servicelearning course. Previously offered every other year, the course has been offered annually since 2013, and more than one-third of participants in the 2016 trip (six of 17) were students who may not have been able to go without financial assistance.

Increasing funding for student study abroad "is absolutely one of my priorities," Altmann says. "It is one of the most important forms of support for students right now. When donors have the far-sighted understanding to give more for study abroad, it's really a great way of asking students to pay it forward. They will discover for themselves the invaluable lessons they will garner from being off campus, and they are more likely to be willing to support future generations in turn. It will perpetuate itself once students understand how transformative the experience is."

To learn more about how to give more students study-abroad opportunities, go to bucknell.edu/ GiveToGlobalLearning.

The Vind and the Vuse

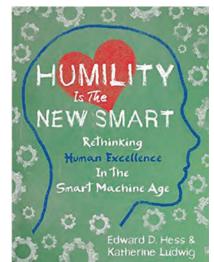
Books&Music

BOOKS

Edward D. Hess and Katherine Ludwig '97

Humility Is The New Smart: Rethinking Human Excellence In The Smart Machine Age (Berrett-Koehler, 2017)

According to the authors, society is on the leading edge of a Smart Machine Age led by artificial intelligence. They contend that this new age will be as transformative as the Industrial



Revolution was for our ancestors, with smart machines taking over millions of jobs. Not just factory work but white-collar jobs also will be automated. To succeed, people need to excel at critical, creative and innovative thinking, and they also need to emotionally engage with others — all things machines can't do well. Hess and Ludwig call this being NewSmart. They offer detailed guidance for developing five NewSmart attitudes and four critical behaviors that will help people adapt to this new reality.

Matthew Stevenson '76

Riding the Rails (Odysseus Books, 2016)



The latest book by travel writer and essayist Matthew Stevenson'76 offers an account of rail journeys across Russia, China, Eastern

Europe, Malaysia, prewar Syria and the United States. Reading the Rails captures not just the romance of trains but also the politics, history, books and tragedies that accompanied these great lines.

Robert Taylor '58

Family Medicine: Principles and Practice, 7th edition (Springer Reference, 2016)



Robert Taylor '58 is co-editor-in-chief of this 1,800-page, two-volume standard reference book for the specialty of family medicine. The 133 chapters, written

by several hundred family physician contributors, cover the full spectrum of health care of the patient in the context of the family.

Caryn Hartglass '80

25 Women Who Survived Cancer: Notable Women Sharing Stories of Hope (Sellers Publishing Inc., 2016)

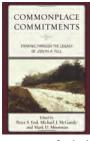


Caryn Hartglass '80 contributed an essay to this collection of personal stories about how to cope with, and prevail over, cancer. Hartglass

joins other notable women such as Robin Roberts, Joan Lunden, Fran Drescher, Alice Hoffman, Barbara Delinsky, Shonda Schilling, Bárbara Padilla, Sylvia McNair and Marissa Jaret Winokur. These women describe how they faced cancer without letting it define their lives or conquer their spirit. All royalties will be donated to cancer research and prevention.

Peter Fosl '85, Michael McGandy '91 and Mark Moorman '83

Commonplace Commitments: Thinking Through the Legacy of Joseph P. Fell (Bucknell University Press, 2016)

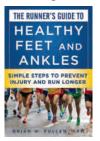


Teacher, scholar and philosopher Joseph Fell taught at Bucknell from 1963 until his retirement in 1993. In this volume, edited by his former students,

an array of scholars consider, criticize and cultivate Fell's key contributions to the phenomenological project. These essays gather the work of the authors who are thinking with and through Fell's key works on Jean-Paul Sartre, Martin Heidegger and John William Miller.

Brian Fullem '86

The Runner's Guide to Healthy Feet and Ankles: Simple Steps to Prevent Injury and Run Stronger (Skyhorse Publishing, 2016)

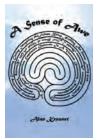


Lifelong runner and podiatrist Brian Fullem'86 provides essential information on how to best take care of the most important piece of equipment

for runners — their feet. The Runner's Guide to Healthy Feet and Ankles includes sections on injury prevention, helpful foot exercises and other recommendations for maintaining foot health. Among Fullem's topics are how to find the best shoe for a runner's foot type, how to tell the difference between soreness and actual injury, and when to undergo foot surgery.

Alan Krasner '79

A Sense of Awe (Balboa Press, 2015)

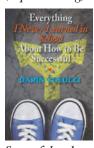


In this meditative book of poetry and haiku, Alan Krasner'79 asks why there is something rather than nothing. Krasner contends that the meaning

of life is defined by the depth of the questions people ask themselves. Sometimes people find themselves unable to move forward and find their true selves, he suggests. Krasner explores how to deal with this dilemma.

Darin Colucci '87

Everything I Never Learned in School About How to Be Successful (Sdp Publishing, 2016)



Filled with easily understood rules for success, humorous and poignant stories and life lessons, Everything I Never Learned in School About How to Be

Successful seeks to demystify and break down success in a way that anyone can understand. Darin Colucci '87 shows readers how to go from poor to rich, from employee to boss and from insecure to confident. Perhaps even more important is his message that success and happiness can and should always be intertwined.

Alan Krasner '79

In Search of Something (Balboa Press, 2016)



An exploration of the meaning of life, In Search of Something is a continuation of Krasner's first book, A Sense of Awe. This collection of

meditative poetry explores the mind and heart, thought and soul. The poems weave through the shadows of life and emerge as a flash of light.

FACULTY BOOKS

Andrew Stuhl (Environmental Studies)

Unfreezing the Arctic: Science, Colonialism, and the Transformation of Inuit Lands (University of Chicago Press, 2016)



Andrew Stuhl weaves together a wealth of distinct episodes into a transnational history of the North American Arctic, proving that a richer understanding of its

social and environmental transformation can come only from studying the region's past. Drawing on historical records and extensive ethnographic fieldwork, as well as time spent living in the Northwest Territories, he closely examines the long-running interplay of scientific exploration, colonial control, the testimony and experiences of Inuit residents, and multinational investments in natural resources.

Carmen Gillespie (English)

The Blue Black Wet of Wood (Two Sylvias Press, paperback edition, 2016)



Carmen Gillespie's book of poems, The Blue Black Wet of Wood, chronicles myriad losses within the greater loss of her husband. The poems are haunted by images of birds

and sky at various times of day, of seas and lakes, of the landscape in every season but especially of the fall.

MUSIC



Bret Alexander '87

Second Story Music (Saturation Acres)

Bret Alexander '87, the primary songwriter and music director of the six-piece rock band The Badlees, released a collaborative effort, Second Story Music, with Jeff Leaman in July. The 13 songs on the album include "Mr. Learn It the Hard Way," "My Side of Our Story and "Lower Mountain Road." Alexander engineered, produced and mixed the album. He played all the instruments except the drums.



OF PEOPLE LACES

Impact of Bucknell's Residential Colleges program resonates through 3 decades

BY SUSAN LINDT

ore than 30 years ago, Professor John Peeler, political science, and his colleagues set to work developing residential colleges on campus. As Bucknell celebrates three decades of themed living-learning communities, Peeler, a champion and architect of the program, reflects on how residential colleges have evolved into a signature aspect of Bucknell's liberal arts-based education.

"It's gratifying to have been part of improving the educational experience for a large number of students," says Peeler, now an emeritus professor. "It certainly is one of the things that I look back on as something I had a major impact on at Bucknell."

Peeler had long been interested in the concept, so when the movement to bring residential colleges to campus began, he was anxious to be part of it.

"Some of us had been working on the idea for several years in the late '70s and early '80s," he reflects. "We had administrators who liked the idea but always had reasons why we couldn't do it. It was about 1982 when Dean Robert Chambers of the College of Arts & Sciences said, 'Let's do it.' It took a couple of years to get it worked out, but the key was having a senior administrator who was willing to give it a try."

Residential colleges weren't common in the early 1980s, but Bucknell also wasn't the first — Lehigh, Cornell, Yale

"The main reason our residential college program is strong is that students opt into it rather than being compelled to participate."

Roger Rothman

and Princeton all served as examples of what could be possible. All shared a purpose: extending learning beyond the classroom to the residential setting, bringing faculty and students closer, and engaging students with common interests from classroom to dorm room. But there were so many ways to do it.

"Yale had a system in which students moved into residential colleges after the freshman year," Peeler says. "Princeton's focused exclusively on freshman year, and then moved into regular dormitories. Lehigh also had a system that went beyond the first year. We elected to start with the first year and do it well. Ultimately, we hoped to expand into the upperclass years."

Today, students choose from eight themed colleges: Arts College, Society & Technology College, Discovery College, Languages & Cultures College, Environmental College, Global College, Humanities College and Social

HAPPY WHERE PEOPLE AND PLACES COLLIDE

For Jennifer Smolko Vey '93, a first year spent at one of Bucknell's first residential colleges was an initiation into the world

Today, Vey is a geographer, urban policy expert and a fellow at The Brookings Institution, where she co-directs the Anne T. and Robert M. Bass Initiative on Innovation and Placemaking.

In fall 1989, she was a young achiever from the suburbs of York, Pa. She knew of Bucknell through her brother, Jim Smolko '81. But she had no real direction, only a desire to take in all that life on campus offered. "People call it the 'Bucknell bubble' and, as an 18-year-old, that really appealed to me," she says.

She landed by accident in Renaissance College, a residential arts and humanities college, housed in Smith Hall. She had enrolled in a survey course, Looking at Art. Unknown to her it was a core requirement for Renaissance College, and the campus housing gods apparently decided the residential experience might suit her.

It did. "It wound up being a really good experience," Vey says. Her roommate, Kristin Longnecker Mollerus '93, became a lifelong friend. Their coed floor and the Renaissance life — gathering to watch and dissect a film, for example — brought her into a close clan. "Our whole hall went to dinner together every night," she says. "We had that kind of group."

She recalls a moment in October: Campus was resplendent with autumn. Her arts professor invited the small class to his home for cider and cinnamon donuts, and there she felt a tiny shift, her first sense of belonging in a larger world.

Vey and her friends became sophomores and, fortified, they dispersed. She found her field, inspired by Professor Paul Susman's economic geography courses and guided by Professor Ben Marsh, geography and environmental studies. She was fascinated with places — buildings, patterns, economies, cultures and disparities. Her attachment to York made her especially curious about how older urban economies and environments thrive or fail. Geography, the intersection between people and place, embraced it all.

She earned a B.A. in geography with an environmental studies minor. After a master's degree in urban planning

at the University of Virginia she had a paid internship in the Fairfax County, Va., planning department and then spent three years as a Presidential Management fellow. The program selects young leaders for managementtrack jobs in the federal government.

She requested assignments at the Department of Housing and Urban Development, in HUD's budget office, its community development area and the Empowerment Zone programs. There, she saw how federal programs best support community revitalization and how they might be improved.

Her move to Brookings, in 2001, gave her the means to ask the questions that had been puzzling her and to contribute her findings to the greater world. Her calm voice grows passionate as she describes them: What makes innovative industries congregate here more than there? How do troubled communities mend? How do their economic and physical wounds heal? And, always, how to support the recovering industrial cities of the Northeast and Midwest — places like York, where she began. — Marilyn Lewis

Justice College. But in the beginning, there were just two: the humanities-oriented Renaissance College and the International College, emphasizing global affairs and social sciences. Although Bucknell didn't ask professors to live in student quarters, as Cambridge and Yale did, the planners crafted a distinctive twotier leadership system to enhance student engagement. Today, as in the original model, faculty are Senior Fellows; Junior Fellows are sophomores living among firstyear students to intentionally create bridges from classroom to residential hallways, thereby steering conversations and carrying academic discussion beyond the classroom.

"One of our key innovations that is still very central to the program is the two levels of leadership in each college," Peeler says. "We saw similar things at other schools but nothing quite as well developed as at Bucknell."

Then there was the question of required participation. Early on, planners considered whether participation should be mandatory, as it was at Yale.

"We concluded we should not require it," Peeler explains. "That's been better because if you require it of everyone, you'll have a much lower-intensity experience than if everyone is really into the program. I think we had hopes in the beginning that this would be so attractive to incoming students that most would want to be part of it." Those closest to the program today see this early decision as one of the program's greatest strengths.

"The main reason our residential college program is strong is that students opt into it rather than being compelled to participate," says academic co-coordinator Professor Roger Rothman, art & art history. "Another strength is that the topics shaping the different residential colleges are faculty driven. We don't administer this program by saying we need



SLASHING AT WASTE

Marty Makary '93 grew up near Lewisburg by way of Liverpool, England, "but I'm not one of the Beatles," he says with a laugh. Son of an Egyptian physician who'd moved to central Pennsylvania to establish a hematology practice at Geisinger Medical Center in Danville, Pa., Makary arrived at Bucknell keenly career focused on medicine but also intent on sharpening his international outlook.

"I had been to Egypt several times by the time I came to Bucknell, so I was always a third-culture kid and found other third-culture kids there," he recalls. "I knew that the world was so much bigger than life in Danville, and the Global Residential College experience really allowed me to explore my interest in issues that face the world and to see that science and medicine are deeply connected to economics and public policy.

'The residential college experience was the first of many opportunities to study in an international context," adds Makary, a pancreatic surgeon and professor of health policy at the Johns Hopkins University (JHU) School of Medicine. In medical school at Thomas Jefferson University, Makary twice studied in Japan, and during his surgical residency at Georgetown University, he assisted his aunt, Mama Maggie, with her mission to help children suffering in the shadow of Egypt's pyramids. Makary co-authored a book, his second, in 2015 titled Mama Maggie: The Untold Story of One Woman's Mission to Love the Forgotten Children of Egypt's Garbage Slums.

After writing that book, he realized "the more time I spend overseas, I'm reminded how small the world is, and it affirms how universal many of the problems are that we address in the United States.'

But it was Makary's first book, Unaccountable: What Hospitals Don't Tell You and How Transparency Can Revolutionize Health Care, that brought

his crusade for greater accountability in health-care practices to the national stage. Since publication of the New York Times-bestselling book in 2012, Makary has traveled the country, speaking to health insurance companies, hospitals, medical schools and corporations such as Apple and Bank of America about transparency in health care.

'Besides transparency, they're also interested in the subject of an organization's teamwork and safety cultures, from my work in creating the surgical safety checklist, used before an operation, he says. Adopted by the World Heath Organization in 2006 with the help of Atul Gawande, Makary's checklist hangs on the operating room walls of almost every hospital in the world.

Makary, who performs surgery two days a week at JHU in Baltimore, spends the rest of his time "advocating on television for doctors and writing for The Wall Street Journal, speaking around the country every week and running Improving Wisely." a program the Robert Wood Johnson Foundation launched in 2016. "We're looking at areas of health care to reduce waste - unnecessary medications, tests and procedures," he says.

He's also writing a new book, with the working title Money Games: The Way to Pay Less for Great Health Care, which is slated for publication later this year

'There's a fundamental philosophical question in all of my advocacy work that keeps coming up again and again," he reflects. "Do patients have a right to know about the quality and price of medical care? I believe they do." - Sherri Kimmel

To see the World Health Organization Surgery Checklist, which Marty Makary '93 helped develop, check out the Bucknell Magazine app or go to bucknell.edu/ WHO-checklist.

five professors to teach this topic — it's based on faculty interests."

For the first 25 years of Bucknell's program, enrollment was steady with about 250 first-year students electing to live in residential colleges out of first-year classes of usually just over 900 students, says Program Coordinator Kelly Finley.

"That's interesting because we started out with two themes and, over the years, added six more and still attracted the same number of students," Finley points out. "Then in 2013, we added the Discovery College, which intrigued our science folks and tapped into a new area of interest."

She says adding Discovery College, plus the University's newly instituted summer academic counseling program that formally introduces incoming students to residential colleges, has increased overall enrollment to 350 since 2013. And now, as Peeler had hoped, expansion into upper classes is taking root. Bucknell already offers students Residential College Alumni Housing, a residential continuation of themed living communities. Rothman said about half the

residential college students elect alumni housing as sophomores. An academic component is also in development.

"We're always experimenting," Rothman says. "We're now in the third year of piloting a sophomore version of our first-year programming. It's on a smaller scale, but we took the idea of the evening common hour and turned it into a mini-course in which students develop a yearlong project related to the theme of their college. They construct the assignments themselves, and they meet with a professor weekly, often over dinner."

Finley says close to 30 students each year participate in the sophomore pilot classes, which are still evolving.

"We're trying to figure out if we want to expand it to all eight themes, or move away from being theme specific, or if there's another model out there that will work," she says. "We're looking for the right mix of experiences to offer students after their first year."

It's perhaps ironic that in the age of cyber communications and social media, a model first identified in 1264 at

FINDING COMMUNITY



Daisy Auger-Dominguez '95 has helped some of the world's largest and most influential companies — Moody's Investors Service, Disney-ABC and now Google — increase and nurture diversity within their ranks.

But her path to leadership roles in these organizations and her own interest in diversity started during a most trivial moment — with an invitation to a party.

In her first two weeks at Bucknell, a student invited Auger-Dominguez to a get-together at Seventh Street House, the African-American studies residence, suggesting she should come since she was Latina.

"That was the first time that I really had someone refer to me as a person of color, and it started my understanding

of my identity within the U.S. racial and ethnic context," says Auger-Dominguez, who was raised in the Dominican Republic and attended an international school before moving to New Jersey at age 16. "As a young woman of color who was recent to the country, I was curious about what that meant.'

Auger-Dominguez would investigate how her identity interacted with issues of justice and equity as a member of the Social Justice College — staying on her sophomore year as an adviser — and as a dual major in international relations and women's studies

"I used the four years I had at Bucknell to explore who I was and the dynamics of being one of a very few in classrooms, and what that meant in terms of culturally dominant views — who spoke most and did better in class, how people socialized, why the students of color sat together at the cafeteria and went to their own parties. We did all that to find community with people we felt we would instantly resonate with and understand, and to create a space of psychological safety."

She began to piece together then the elements that would inform her work today as Google's global head of diversity staffing. Tech companies such as Google emphasize user experience and are now setting their sights on "the next billion users," Auger-Dominguez says.

Living in places such as South Asia, Africa and Central America, those users don't look at the world the same way as the previous billion. "When we're creating products, if we don't have someone

at the table who thinks about that experiential perspective, then we lose out," she says.

The same awareness can apply to any field, Auger-Dominguez notes. In her previous work at Disney-ABC, where she was vice president for talent acquisition and workforce diversity, she says creating entertainment that appealed to different audiences began with a diverse stable of writers and content creators.

Auger-Dominguez worked for the network during the launch of the hit comedies Black-ish and Fresh Off the Boat, which focus on nonwhite families. and dramas American Crime and How to Get Away with Murder, which feature richly diverse storylines and casts. While she doesn't take credit for the success of those shows, Auger-Dominguez says they wouldn't have come about without an array of viewpoints among company leaders, some of whom she helped hire or promote.

"You can't build a strategy on marketing alone," she says. "You have to believe in the folks who create the content you're going to disseminate to the world."

"At Google," she adds, "I'm proud of being able to help create more access and opportunity for diverse talent to be makers and to join the tech industry."

In other words, she intends to offer an invitation. — Matt Hughes

To watch an interview with Daisy Auger-Dominguez at Bucknell, go to bucknell.edu/ speakingofsuccess.

A SENSE OF BELONGING

Many months before my arrival as a firstyear student, I was preoccupied by the fear of transitioning to residential-style living. I grew up without siblings and was afraid I'd struggle with surrendering the personal space and alone time I had been accustomed to at home. I valued the unchanging comfort of a room to myself and the convenience and independence of going about my routines as I pleased, without disruption. The notion of exchanging my pleasant solitude for eating, sleeping and bathing in the midst of complete strangers was at best unappealing, at worst incredibly terrifying.

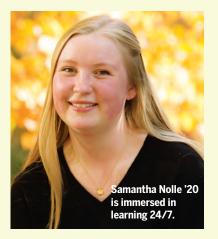
Perhaps this is why the concept of the residential colleges program first resonated with me. Students in the program are placed in halls according to their interests, which are organized into eight themed communities. Each resident within a specific residential college attends the same first-year seminar, participates in off-campus trips and takes part in weekly common-hour discussions that revolve around the hall's theme. Residents are continually immersed in the process and experience of learning, and the dividing line between the classroom and the outside world is imperceptible. As someone who felt daunted by the idea of living with strangers, joining a community of individuals who shared my interests and academic goals was an intuitive choice. My initial fear of the transition to college life was almost immediately assuaged by the kinship and sense of belonging that

began to grow within my hall.

In the few months that I've been a member of Humanities Residential College, my hallmates and I have hand crafted paper, attended a performance of Mozart's Don Giovanni at the New York Metropolitan Opera House and engaged in more late-night discussions than I could attempt to remember. My original goal of an easy transition into the first semester of college was realized, then quickly surpassed by the endless opportunities for discovery and new experiences that present themselves within the program. In October, we began work on independent projects related to our studies within our seminar classes, with the intention of presenting at the annual residential college-wide symposium on Dec. 3. I planned to discuss the parallels between the perceived narcissism of modern day selfie culture and historical reactions to portraiture in art history.

The benefit of living alongside classmates truly became apparent as I prepared for my talk, since research for my topic extended beyond class time. I was able to gain valuable insights from discussions with my peers, who were presenting on topics closely related to mine.

The most valuable aspect of living among like-minded peers, for me, is the genuine bond I share with my hallmates. Friendships within a residential college are not merely dependent upon an arbitrary assignment but are grounded in mutual experiences and shared passions.



Whether you're looking to discuss an assignment for a class, or the role of the middle class in the 2016 presidential election, there's a very good chance that one of your hallmates is as eager to converse as you are. In this same sense, it's easier to transcend differences of origin or background because of these common goals and interests. Focused on the shared objective of learning rather than these disparities, you're left feeling as if you belong to a greater, harmoniously supportive community, moving forward as one. — Samantha Nolle '20

Samantha Nolle '20 is a pre-law English major from Bernardsville, N.J. She is a staff writer for The Bucknellian, editorial assistant for Bucknell Magazine and a member of the Bucknell University Choir, Chapel Choir and Opera Theatre ensembles.

the University of Oxford's Merton College is still relevant. After a brief flourishing in this country's earliest Colonial institutions, the residential-learning model was superseded by the German model of free electives without the obligation of chapel attendance, and dorm and community rules. Early in the 20th century, Princeton President Woodrow Wilson led the charge to revive residential colleges to "awaken the whole man" in hopes Princeton would be, "not a place where a lad finds a profession, but a place where he finds himself."

Once again universities grouped students in living arrangements where they could pray, eat, discuss and debate — and with the more practical hope the arrangement would keep them out of trouble.

Even as late as the 1960s, universities served as parental surrogates for students. But a change was afoot.

"There was a big shift in higher education away from 'loco parentis' to one that acknowledged that students are adults who can vote and go to war," Finley says. "They don't need a parent so much — they need to learn what it means

to be adults. So schools moved away from that approach and toward student development."

On Finley's office shelf sits a thick, blue three-ring binder that provides a snapshot of the University's approach to bridging the gap between the classroom and student residential experiences — a sort of blueprint for Bucknell's residential colleges. Memos typed on onion-skin paper show the attention to detail paid by Peeler and his colleagues as they designed Bucknell's program from the 1970s into the early '80s.

A sleeve holds dated pamphlets from other schools' programs, including Northwestern University, Bryn Mawr College and the University of Illinois. Professor John Murphy, English, an early proponent of the program, asked colleagues to "Xerox" plans for meetings. Perhaps a measure of the undertaking's mood is revealed in Murphy's memo signoffs, which swung from "Encouragingly yours," to "Insistently yours," as deadlines neared.

A 1986 memo explains that the International College would feature a short-wave radio, a piano and sound

system. Several other memos questioned whether the first year's schedule (which included a screening of the Harrison Ford film Witness, a flea-market expedition and treasure hunt) was too ambitious; another suggested "fireside chats" might have a better chance of long-term popularity if the issue of alcohol consumption was discreetly introduced later rather than sooner. On the challenge of keeping students engaged, a handwritten letter from a Bryn Mawr residential college administrator cautioned that while "fireside chats" are a great idea, their location matters. She described witnessing "large (and I do mean large) crowds of people in TV lounges" watching Cheers on Thursday nights rather than conversing. "I'd hate to compete with a television set," she concluded.

Rather than visiting local flea markets, today's students travel to attend Broadway shows and visit the National September 11 Memorial & Museum in New York City, and to Washington, D.C.'s National Gallery of Art. They participate in Stop the Hate marches and service projects in Lewisburg. And the difficult leap from high school to college is reduced to a step.

"I struggled with the adjustment and the heightened expectations of college," says Megan Grossman '19, a chemical engineering major who joined the Society & Technology College. "The college really helped me integrate into an academic community that shared my interests. For that, I'll always be thankful. It made Bucknell a home away from home for me."

Grossman was so sold on her first-year experience in the Society & Technology College, she became a sophomore resident fellow in the college's alumni housing.

"Joining a residential college was one of the best decisions I made my first year at Bucknell. I want to make it a positive experience for other first years," she says. "I like putting effort into something I believe in, and I truly believe in the residential colleges. It's really rewarding for me."

For Peeler, therein lies the reward, 30 years later and counting.

"It illustrates that we shouldn't be afraid to try something new," he says. "You can work on an idea and develop it and tweak it and, ultimately, there's a good chance it will persist and have a positive impact for many years." @

EDIBLE SOLUTIONS

Andrew Chahrour '06 has a morning commute many would envy.

After finishing his usual breakfast of greens and eggs, downing a cup of coffee and saying goodbye to his wife, Alexandra Madsen '08, Chahrour heads out the back door and begins his half-mile hike into the hills, never touching pavement on his way to the nonprofit farm and orchard above the San Francisco Bay that he manages.

The farm is small — just 5 acres — but its size belies its rich biodiversity. Chahrour believes it might contain the most diverse assemblage of certified organic fruit-bearing shrubs and trees in North America.

"You name it, we probably have more than one variety," Chahrour muses. "We have 57 varieties of figs, 62 varieties of pomegranates, plums, apricots, peaches, apples, pears, persimmons, walnuts — it's an incredibly diverse collection."

The farm is one of five programs of Planting Justice, an environmental and social justice nonprofit Chahrour joined as the fourth member in 2010. (It now employs 41.) Many of the trees Chahrour and his team have planted are still maturing, but already he's making cuttings that can be cloned in a nursery and eventually sold for \$60 each. The farm will also supply local farm-to-table restaurants and provide produce for communitysupported-agriculture (CSA) programs. Chahrour hopes it eventually will even serve as an incubator for food-based small businesses. Those efforts will support Planting Justice's education, empowerment and outreach initiatives.

"We're working on improving a food system that is broken," Chahrour says.

The organization views food as a medium for interacting with the public school and prison systems. It has created an edible garden inside San Quentin Prison and employs 14 people who were once

inmates there — all of whom now earn at least \$20 an hour. Planting Justice also runs an education and after-school program in lowincome school districts that has developed a 15-week curriculum, as well as campus outreach and fundraising efforts.

At Bucknell, Chahrour majored in environmental science and was in the Environmental Residential College. He says a Residential College seminar taught by Professor Ben Marsh P'04, geography, offered an early epiphany about conventional agriculture — a field for which his current work offers an alternative.

"I had never considered that agriculture was something we ought to consider a human impact," says Chahrour, who grew up in the exurbs of Cincinnati, Ohio. "In conventional agriculture there is clear-cutting and leveling and straightening of creeks — I had never thought about any of that. It opened my eyes to one of the most prominent land uses in the landscape that I knew best but had never really investigated."

Besides his work with Planting Justice, Chahrour is a partner in Wild and Radish LLC, a collective that owns the land the farm sits on (which it leases to Planting Justice for \$1 a year) as well as several acres the group hopes to develop into a sustainable-housing community. Andrew and Alex live in the first of four homes planned for 1 acre of their property. He also runs an online retail business, Clean Water Components, which sells equipment for reusing "gray" water produced by domestic activities such as showering and laundry for landscape and garden irrigation.

"I'm inspired and instructed by nature all the time," Chahrour says. "It feels like a calling, really, to be involved in a movement that is uplifting both the environment and the people in it." — Matt Hughes

Watch an aerial video of the farm in the Bucknell Magazine app or at bucknell.edu/PlantingJustice.





History research team travels to document Bucknell's contribution to World War I

By Sherri Kimmel

It's Veteran's Day 2016, and a group of Bucknell faculty and students are preparing to meet at Brasserie Louis on Lewisburg's Market Street. They'll be plotting a journey to the fields of Flanders and other battlefields in Belgium and northern France where so many fell — 8.5 million on all fronts — and still remain. Victims of the Great War, 1914-18. In two years, it will be 100 years since the Armistice with Germany — that 11th hour of the 11th day of the 11th month of 1918.

By then, the team led by Professor David Del Testa, history, with the help of Professor Adrian Mulligan, geography, and student researchers Amy Collins '18, Anthony Paolella '18, Julia Carita '20 and Julia Stevens '20, will have been to Europe and back with rich Bucknellrelated stories to share. Bucknell Magazine editor Sherri Kimmel will be along to report on the excursion for a future issue, and Dante Fresse '18 will film a short documentary.

This May, the group will spend 10 days in France and Belgium, recreating the experiences of a select few Bucknellians — many of whom were the same age as today's student researchers a century ago, when they fought and, in some cases, died. Each team member chose a Bucknell graduate to research and eventually chronicle for a chapter in a short book.

Their selection processes varied. Julia Carita chose Thomas Agnew, Class of 1920, she says, "because he served in the ambulance corps. He also won a French Croix de Guerre with a Bronze Star for bravery."

Mulligan matched with a pilot, Joseph William Aleshoukas, Class of 1915. "His unit saw combat but was also involved in a lot of reconnaissance and mapping, which is something I'm especially interested in, as a geographer," he says.

Julia Stevens was drawn to Katherine Baker, Class of 1892. "Women generally did not get enough recognition for their efforts," but part of a French orphanage is named for her, she says.

Del Testa, who teaches courses on World War II and the Vietnam War, was drawn to the topic after Isabella O'Neill, University archivist, described some items in her care related to Bucknell's involvement in World War I.

In 2013, Del Testa began building the Bucknellians in WWI database, which now contains 715 men and women who served overseas or at home in the military, ambulance corps or strategic government service. Of that number, 35 died as a result of their participation in the war. "I realized that the sheer commitment of Bucknellians to the war made researching it an interesting prospect, and I also knew that the project would attract undergraduate research interest as well," he says.

Two students stepped forward in 2014, supported by the Presidential Fellows Program. Since then, two other presidential fellows and a Dalal fellow, funded by The Dalal Family Fund for Creativity and Innovation, have worked on the database, filling in vital missing data. The database already is being used by Del Testa's History 100 students, and a condensed version will be available to the public.

Del Testa, who expects the project will continue until the 100th anniversary of Armistice, welcomes input from anyone who has information or memorabilia related to Bucknellians involved in the war. Some alumni have already contributed chilling journal entries by ancestors who witnessed mass disease and death.

Collins, now in her third year with the project, says, "I've become a better student, historian and person because of this research opportunity, and it's changed the way I see the world. World War I was especially significant to the U.S. because that was what inevitably made us a great

Check out photos from the archives, firsthand accounts from alumni who served in the war and the full list of alumni who will be the subject of the team's research in the Bucknell Magazine app and at bucknell.edu/WWI-archives.

STUFF

Reigning national champion college basketball coach applies lessons learned at Bucknell

By Matt Zencey

hen his team took the floor with 4.7 seconds left and the score tied in last year's NCAA men's basketball championship game, Jay Wright '83 was one of the calmest people in a building filled with 74,000 roaring fans.

During the timeout, his Villanova Wildcats had been laser-focused, without any prompting from him, and they came out ready to run a play they had practiced repeatedly.

"I was so proud, so pleased with how they competed the entire game. I was so happy coming out of that huddle — where their minds were, where their hearts were," he says. "I wasn't living and dying on that [last] shot." He knew that either his players would make a shot and win, or the game would go to overtime.

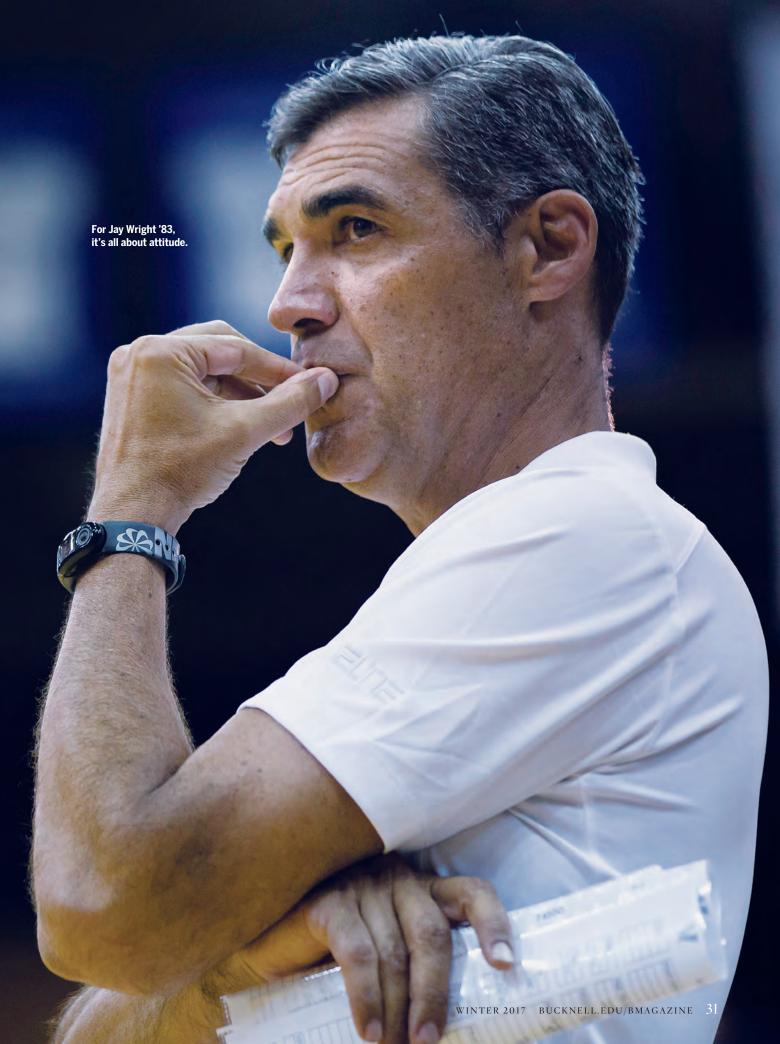
As the final tenths of a second ticked off the clock, Kris Jenkins hoisted a long three-point shot that swished through the net, winning Villanova and Wright the national championship.

Soon commentators everywhere were talking about Wright's amazingly subdued reaction to the historic win. He looked as if he'd just been handed the day's mail. Ho-hum.

Later, he told the media that he was briefly unsure whether the referees had officially declared that time ran out and the game was over. Confirming that, he gave a now-famous shrug and proceeded with the traditional postgame handshakes.

"Of course, I was thrilled to win the national championship, and I would never give it back," he says. However, "we are not evaluating ourselves on whether we won or lost, but on how we comported ourselves — how the guys compete, how they play together. ... Our goal was never to win a national championship. Our goal was, 'Let's see what is the best this team can be.'"

Mission accomplished.





During practice scrimmages, Wright teaches players how to deal with adversity.

The 2016 national championship cements Wright's status as an elite coach and potential Hall-of-Famer.

With 97 wins and just 13 losses by the end of last season, his Villanova team had the best Division I basketball record in the country over the last three years. Twice named national coach of the year, Wright came into this season with 476 wins in his 22-year career. Eleven of the last 12 years, his Villanova teams have made the "Big Dance," the NCAA tournament, where his teams have won 20 games.

The national championship "made clear to everyone how good he is as a coach," says current Bison men's basketball coach Nathan Davis. "He's a great example of the type of people the University puts out." The man who coached Wright when he played at Bucknell, Charlie Woollum, says, "The job they did in this tournament was as good as I've ever seen."

Many observers noted that Villanova's championship squad didn't have a single player who was sure to get drafted, let alone make it, as a pro in the National Basketball Association. In building his teams, Wright doesn't rely on a couple of high-school superstars who spend a year or two in college

before leaving early for million-dollar paydays in the pros.

What Wright's team does have, writes CSNPhilly sports analyst Reuben Frank, is "a locker room full of guys that are talented, play well together, care for each other, hustle and insist on placing team goals ahead of personal goals."

Wright says his approach and success as a coach have deep roots in his time at Bucknell, on and off the basketball court.

He came in totally focused on basketball and loved the rapport he found with Coach Woollum and the other players. But everywhere he turned, he discovered "these people are much more about your character and your intelligence than they are about your athletic ability.

"That's where it hit me - there is much more to life than just being a good basketball player."

Coming to Bucknell was "the best decision of my life," even if, he says with a laugh, he made it "for the wrong reason." He came for the basketball and stayed for the character-building experience.

As a coach, Wright says, "We are much more concerned with what kind of men our guys become. We really

think part of being the best player you can be stems from being the best man you can be. We take a lot of pride in that, not just our program — the entire university."

Pat Flannery '80, the Bucknell men's basketball coach from 1994 to 2008, was a Bison graduate assistant for the team when Wright arrived on campus. He remembers Wright as intensely competitive, with a definite swagger. "He was always a Philadelphia guy, and he let you know it all the time. ... He was tough."

Flannery, who is now a senior officer in Development & Alumni Relations, remembers how, from day one, Wright would argue forcefully about what the score was in pickup games. The cocky first-year student wasn't afraid to go jaw-to-jaw with upperclassmen.

As a junior, Wright led the Bison in scoring with 11.9 points a game and was team MVP, but the squad won only seven times. His senior year, he was coming off an injury and even though he was co-captain, he lost his starting job to better performing players, such as Jaye Andrews '85, who became one of the Bison's alltime leading scorers.

Given his success as a junior, Wright says, "I thought I was entitled to start," even though he is now quick to say, "Jaye Andrews was better. He was better for our team. And I just couldn't accept that."

Frustration mounting, he wanted to quit. He gives great credit to Coach Woollum, who encouraged him to finish.

Wright says, "I eventually accepted my role" — an early man off the bench, playing about a quarter of every game, averaging just under four points — but "still not enthusiastically." That year, the Bison improved by 10 wins — one of the best turnarounds in the country.

Woollum says Wright "is tougher on himself than I was. He did a very good job for us. He's a very good competitor. ... He provided good leadership for our team."

Because of his own experience, Wright says, "I'm very sensitive to every guy on our bench, to the last guy."

Jaye Andrews says Wright was a big help when he came onto the team as a first-year student. Wright was "a model teammate," he says. "He welcomed the four of us who were freshmen as though we were family."

"Whatever it was" in Wright's senior year, Andrews says, "it was between him and the coaches. None of that spilled onto the court. His leadership on the team was superb."

As was his attire. Woollum says Wright and teammate Ray Moss '83 "used to try to out-dress each other. Ray would wear a hat. That was the difference."

Wright remains a style-setter, regularly appearing on any list of "best dressed" coaches in college sports. Known for a wardrobe that is tasteful, not flamboyant, Wright was featured in a photo spread published by *GQ*, the men's fashion magazine, in December.

hose who played with and coached Wright didn't see him and think, "He's a natural coach. Some day he's going to win a championship."

But Flannery, Bucknell's long-time coach, says he could see that Wright had the passion for basketball, the

drive and the outgoing personality to do well in coaching. Andrews, who went on to coach basketball for 25 years, says neither he nor Wright was a classic "coach on the floor" during their playing days.

Makoto Fujimura '83, a renowned artist now on Bucknell's Board of Trustees, did see a glimmer of what was to come. He encountered Wright on campus the summer after their first year and they began exchanging thoughts about their futures. He says Wright confessed that he knew he wasn't a top-level basketball player, but he was very clear that he wanted to become a top-level coach.

Wright's coaching philosophy can be summed up in one word: "Attitude." He preaches the simple message: You can't control what happens to you in a game, but you can control your attitude.

Wright drives the point home in highly demanding practices. Drills require players to dive for loose balls. Try to cruise through it, and you're made to run laps. At practice scrimmages, Wright will purposely have his "referee" make bad calls, to train his players how to deal with adversity that's beyond their control.

The word "attitude" has become "kind of a mantra," Wright says. Coming out of a huddle, it's the only word his players shout. Going into the huddle that led to the championshipwinning shot, the players, without prompting, were telling each other, "Attitude! Attitude!"

Wright also cares passionately about how his players will do in the world beyond college basketball and what kind of men they will become. "His kids would do anything for him, because he does a lot more than just coach them," says Flannery.

Kris Jenkins, a senior forward, can attest to that. "We play for each other," he says. "The family atmosphere is what attracted me here. This is a brotherhood that will last for a lifetime. and coach is at the center of that."

right graduated from Bucknell with degrees in economics and

sociology. "I was a good student," Wright says. But "I was a passionate basketball player. I wouldn't say I was a passionate student."

As Villanova headed to last year's Final Four tournament, 15 of his Bucknell buddies made the trip. "A lot of my best friends are still all my fraternity brothers from Sigma Chi and the guys I played basketball with," Wright says.

Wright "has always remained superhumble," according to Tim Christie '83, a fraternity mate and friend who met Wright as a first-year student living on the same hall. "He's as sincere and genuine as it gets. He'll laugh at himself more than the rest of the guys. His success hasn't gone to his head."

Now a couple months into this season as the defending national champion, Wright looks to avoid the mistake he admits he made after reaching his first Final Four in 2009. Back then, he says, "We thought, OK, we did it. We got to the Final Four; now our goal is to repeat it. At any cost."

After two decent seasons, disaster struck: a 13-19 record and no tournament bid.

"We got away from our core values," Wright says. "And as our leader, that's on me. Our goals become the results and not the process."

That process, he says, is pretty simple: Recruit players who buy into the Villanova system and get them "playing hard, playing together, playing smart and playing with pride." From there, he says, the results will take care of themselves.

Those wishing to know more about Wright's formula for success can find it in his first book, Attitude, due out this spring.

As his team runs the court this year, the man who is the reigning national champion basketball coach is applying the lessons he learned as a player and student at Bucknell: When you are coaching young men who will soon launch onto their path in life, there's more at stake than just winning the

THE BISON BOND

TWO BUCKNELLIANS POWER ATLANTA HAWKS

By Alexander Diegel

ike Muscala '13 is the only Bucknell graduate to ever play in an NBA game. Charles Lee '06 is the only Bucknellian to suit up as an NBA coach. And they both happen to work for the Atlanta Hawks, hardly an also-ran in the NBA. Muscala and Lee helped power the team to three straight playoff appearances, including in the 2015 Eastern Conference Finals. Bison pride indeed.

Muscala, a key player for the Hawks off the bench, started with the team in 2013, a year before Lee's arrival as an assistant coach. Muscala credits his time at Bucknell for teaching him how to "be a professional - having a good work ethic, looking to improve and being positive. At Bucknell, I learned to converse with my teammates. coaches, owners, fans."

Lee notes Muscala's work ethic as a strength of the power forward's game. Bucknell's game plan often depended on Muscala, a two-time Patriot League Player of the Year.

"It was a high-volume system for him," Lee says. For the nonhoops heads, that means the Bucknell offense pretty much ran through Muscala — to the tune of 19 points per game his senior year. It's a different experience in the NBA, where virtually every player was the star of his college and/or high school program. Even though Muscala does not "get as many touches, I've seen him buy in fully and commit to what the coaches are asking of him," Lee explains. "I've seen that from him in the weight room. I see it when he does agility work. I think this year will be a good vear for him to show how he's grown."

Lee's route to the NBA was less direct. After starring at Bucknell — he scored 15 points in the University's legendary upset win over powerhouse program Kansas in 2005 — Lee played professionally in Europe and Israel for four years as a guard. He then took a job on Wall Street doing equity trading at Bank of America Merrill Lynch, but could never shake his yen for basketball. After two years, he returned to his alma mater as an assistant coach under Dave Paulsen. He coached the Bison from 2012 to 2014, then moved on to the Hawks. He credits his experiences and relationships at Bucknell as reasons why he's coaching in the NBA today.

"The things I learned at Bucknell, I'll never forget," Lee says. Pat Flannery '80, coach from 1994 to 2008, "has been a great sounding board. Then working with Coach Paulsen is when my basketball mind started maturing."

For both Muscala and Lee, the journey is ongoing. Muscala still has many years to do what he loves most. But when the time comes for him to lace up his sneakers for his last game, he will be prepared for his next step.

"I think what Bucknell instilled in me, and what I look forward to, is being able to use my business degree," Muscala says. "But for right now, my focus and energy is on basketball."

Lee aims to be a head coach, but he's taking it "season by season." For now, he's still putting those classroom lessons to use in the coaches' meetings. "There are a lot of days where we're sitting as coaches, and everyone sees the game a little bit differently. But we have to get on the same page. Some of the tools I remember learning in the Management 101 group and other classes that I took at Bucknell have carried over and helped me in the real world."



WHY BATMAN IS GOOD FOR THE BRAIN

Psychologist Stephanie Carlson '91 reveals the key to kids' complex thinking

BY EVELINE CHAO

t's the moment every parent dreads: the full-blown screaming tantrum in the grocery checkout line. The reason for that moment? Until about age 5, children have poor executive function, or the set of brain skills required for impulse control and flexible thinking.

Executive function — often called the "air traffic controller" of the mind — is a central preoccupation for Stephanie Carlson '91, a professor at the Institute of Child Development, University of Minnesota, and CEO of Reflection Sciences, a company that provides executive-function measurement tools and professional development.

Carlson first became interested in child development and education as a psychology major at Bucknell. Then, while pursuing her psychology Ph.D. at the University of Oregon, Carlson began to study children's ability to consider the perspectives of other people, or as she describes it, "the understanding in a toddler that Mommy can like coffee even though I prefer orange juice."

Kids who are good at adopting others' perspectives do better in school, because they have a sense of how the teacher is thinking and what material to focus on, says Carlson. And they do better with social development because anticipating another person's thoughts and feelings helps them avoid conflict and reach compromise. Good executive function is key for such complex thinking. To that end, Carlson's present-day work examines how executive function develops and can be improved.

In one set of studies, Carlson found that psychological distancing helps children perform better on executivefunction tests. Children ages 4-6 were given a boring computer task — with a tempting iPad lying nearby. Those who were told beforehand to pretend to be Batman (or another character known for competence) were better able to stick with the task. Carlson calls this the "Batman effect." It also helps to think about oneself in the third

person — for example, a child named Billy asking himself, What should Billy do?"

"Stepping outside of the self gives you more control over your thoughts, actions and feelings," says Carlson.

The Batman work is part of a larger interest in what Carlson calls pretend play. Kids spend two-thirds of their waking hours playing and pretending — and a lot is happening while they're at it.

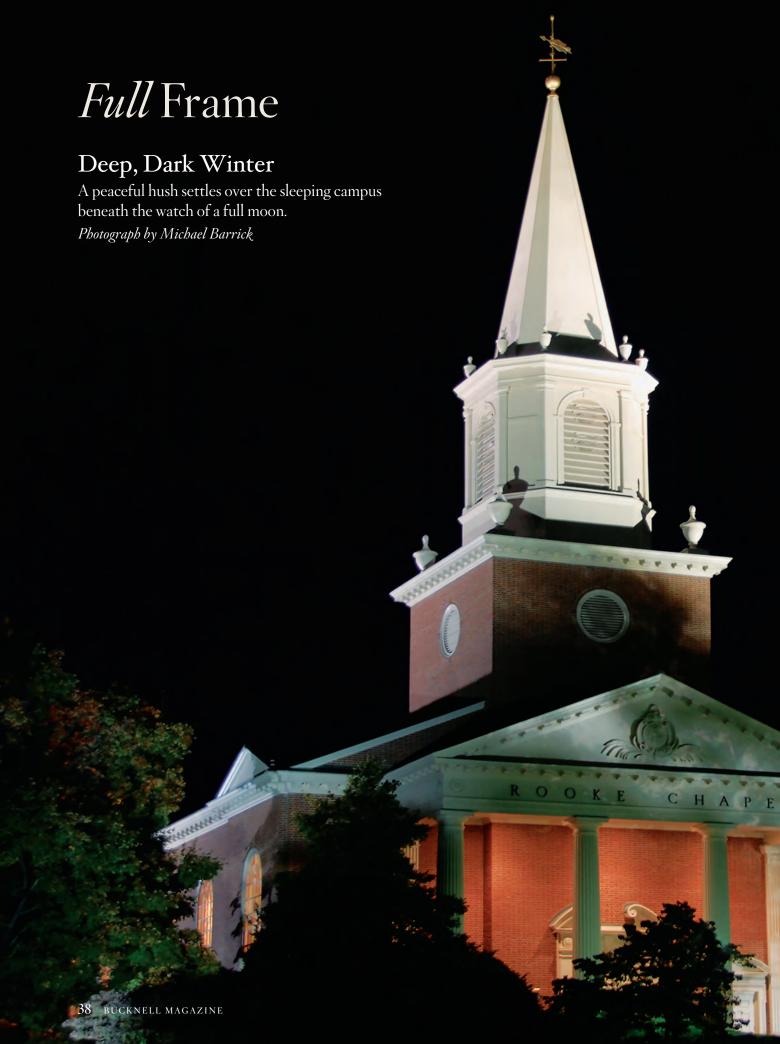
"When kids engage in role-play, they're getting a lot of practice with executive function," says Carlson. They're holding a script or plan in mind for their play. They're controlling impulses and maintaining contradictory ideas: for example, making mud pies and pretending they're real, but without actually eating them. And, they're learning to shift flexibly between different ways of thinking — "I'm the mommy, you're the baby. OK, now let's switch," as Carlson puts it.

In related work, Carlson has shown that being taught mindfulness and reflection techniques at school each day improves children's executive function.

To reach all of these conclusions, researchers need measurement tools. Carlson and Phil Zelazo, her partner in business and life, have developed such a tool, called the Minnesota Executive Function Scale, and make it available as an iPad or tablet app to people outside academia through their company, Reflection Sciences. In true Bison spirit, the company board includes two alumni: Chairman John Carlson '73 (unrelated to Stephanie), and Director Rich Goglia'73.

"We want to help improve children's lives through cultivation of executive-function skills, because of the role it plays in academic achievement and beyond," says Stephanie Carlson. 3

Eveline Chao is a freelance writer based in New York. Find her at evelinechao.com.



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Alumni House

Opportunities&Events

Warm Welcomes Abound

Alumni and parents meet in social settings to solidify the Bucknell bond By Heidi Hormel

ust as students settled into the new academic year, and pick-your-own pumpkin signs popped up all around, Bucknell Welcome Receptions were gearing up across the nation.

Sponsored by the Alumni Association and regional clubs, the receptions are held annually on or around the third Thursday in September. This year the clubs hosted more than 20 receptions that featured giveaways, appetizers and an informal meet and greet.

"We want the alumni and parent community to come together to say 'welcome' to both the new graduates who have settled in a city and to all senior associate director of Alumni

other Bucknellians who have moved to that area recently," says Kristin Stetler, Relations.

No matter the class year, Welcome Receptions are a way to stay in touch, something like mini-reunions.

Alice Healey Wolpert '40, who couldn't attend her Boston Club event, sent a greeting nonetheless to Bucknellians in an email: "Welcome from a Newton, Mass., Bucknellian, and happy days as you begin new careers in a new setting."

Bucknell Club of Greater Susquehanna Valley board member Trisha Heimbach Shearer '96 says, "I would encourage alumni to attend a welcome reception. It's a great foundation for interesting and fun conversations and a great way to expand your network."

Shearer, the vice president/ director of marketing and human resources at West Milton State Bank, also works throughout the year to make any new faces feel welcome and connect them to people who may be in the same business or have similar interests.

Stetler adds, "A recent graduate said it was nice to reconnect with classmates who have landed in the same region. And it was nice to come together and to see the broader community they don't know ... yet."

uates gather in Boston. Inna Fitzpatrick '15, '15, Wallis Gaillard '15

For more on Welcome Receptions and Regional Clubs, visit bucknell.edu/ RegionalClubs.

Learning to Thrive

Classroom experience provided a crash course in the intricacies of business development

By Michael Dermer '90

hen I chose Bucknell, I knew that I was going to get a wellrounded education as well as a chance to play baseball for the orange and blue. What I didn't know was the impact that one class, Management 101, would have on my future. Students had to run a business - everything from creating a concept to electing officers to pitching for a loan.

My team's business was Bison Ices. Some of the engineers in our company rigged bicycles so they could hold three vats of Italian ice. We transported the ice around campus to our customers — including students and faculty — and to events. It was common for field operations to call back to home base (a vacant room in Schwartz Hall) and say, "We've got an emergency. We are out of blueberry."

On a moment's notice, we would pedal our ice, literally, anywhere on campus. I was the CEO.

Not only did I learn how to run a company, but I met a friend, Randall Wakeford '89, who served as director of operations for Bison Ices. Nearly a decade later, Randy would become the first employee of my company, IncentOne, an incentive program for improving employee health. When I sold IncentOne to WellTok in 2013, Randy stayed with that company.

The skills I learned at 19 allowed us to take our experience into the real world. While I wish I knew then what I know now, I also wish I had looked at that experience not as a class but the start of my identity as an entrepreneur. If I had, I would have started the journey to become a better entrepreneur at that moment, instead



of years later, when I started my first company.

In my recent book, The Lonely Entrepreneur, I say that being an entrepreneur is not a job; it is an identity. The lessons I learned at Bucknell provided my foundation for becoming an entrepreneur.

Michael Dermer'90 is an entrepreneur, speaker, lawyer and founder/author of The Lonely Entrepreneur — a methodology that helps entrepreneurs with the one issue they all face, the struggle. For more about Dermer and his book, go to lonelyentrepreneur.com.

If you have a WE DO story to share, please submit it to bmagazine@bucknell.edu.

ALUMNI ENTREPRENEURS: RYAN '06 AND LIZ LORSON BOWER '07 AND TOM '07 AND LAURA REARDON **WAGNER'07**

Well Crafted Pizza is a food truck and catering business that has united four Bucknell friends in a common venture, and they're hoping it can bring their community together, too.

"We see food as an avenue to bring people together to enjoy being with one another," says Liz Lorson Bower '07, who co-founded Well Crafted Pizza with her husband, Ryan Bower '06, and Tom '07 and Laura Reardon Wagner '07.

They start by sourcing nearly all their ingredients in and around their Baltimore-based business. Their truck — a restored '49 Dodge with a wood-fired oven and tap system on the back — also brings them closer to their customers. since it lacks the interior kitchen of a typical food truck.

Since launching last April, Well Crafted Pizza has catered weddings, rehearsal dinners and birthday parties, and served the public at nearby breweries and wineries. The mobile restauranteurs have more recently established a home base at a Baltimore farmers' market, and eventually, they may seek out a brick-and-mortar location.



The partners ascribe their company's ethos — summed up in its name — to lessons learned at Bucknell. "The importance of doing as good as you can possibly do for people is something we attribute to our Bucknell experience," Ryan Bower says. — Matt Hughes

Learn more at wellcraftedpizza.com.

Class Notes

Alumni Near&Far

Come up with a clever caption for this archival photo. The best five entries submitted to bmagazine@ bucknell.edu or facebook.com/ BucknellU no later than March 1 will win a Bucknell T-shirt. Click here to see the winners of the fall issue's caption contest.

PICTURE THIS

Find the alumni photo gallery at bucknell.edu/bmagazine or in the Bucknell Magazine app.

ONLINE EXCLUSIVES

Judi Krieger Rogers '78: An essay about '78ers in the Bucknell Magazine.

Watch Rebecca Turkington Congdon '82's journey from engineer to artist.



Last Word

What Life Brings You

Longtime advocate for persons with disabilities cheers daughters on to Paralympics glory

By Deborah McFadden '79

y Bucknell story is not a traditional one but is filled with lessons that helped inform my future. I entered Bucknell with much excitement about the possibilities for my life. I was active and involved and was learning the importance of a good education and community service.

While at Bucknell, I became very ill and, soon after taking a medical leave, contracted Guillain-Barre syndrome, a neurological disorder that left me paralyzed and in a wheelchair for nearly five years. I spent more years learning to walk again. This wasn't the life I had imagined, but there I was, in a wheelchair, experiencing firsthand the kind of discrimination that you only read about in books. The experience, combined with my membership in Bucknell's Concern and Action volunteer-service club, was the impetus for my life of advocacy.

In 1989, as a result of my advocacy for persons with disabilities, President George H.W. Bush asked me to serve as his commissioner of disabilities. I accepted immediately and was honored to play a significant role in the writing and passage of the Americans with Disabilities Act.

When the Soviet Union was dissolved, President Bush charged me to provide aid to orphanages and hospitals for children in Russia. I traveled there frequently, bringing medicine, food and whatever might improve the quality of life for these children. On each trip, I was overwhelmed by the need but also heartened by the humanity of the children and their caregivers.

On one trip I met a young girl who would become my daughter. Tatyana, 5, was born with spinal bifida, and was extremely malnourished. I didn't know how long Tatyana might live, but I knew instantly that I needed to bring her to America and get her on a path to better health. After multiple



Hannah (left) and Tatyana McFadden after the women's 100-meter dash at the Ú.S. Paralympic Trials, where the sisters placed first

surgeries, I got her involved in sports to improve her health and soon she began to thrive.

Several years later, I adopted Hannah, and a few years after that, Ruthi, both from Albania. I had not planned to adopt more children. But it felt right. When Hannah was 5, she had her leg amputated above the knee due to congenital bone issues. As Hannah grew, she chose prosthetic legs, in bold purple and pink, to display her pride and confidence in who

"I was overwhelmed by the need but also heartened by the humanity of the children and their caregivers."

she was. Like her older sister, participating in athletics made her stronger and more self-confident.

Today Tatyana, 27, and Hannah, 20, are internationally ranked first and fourth, respectively, in their track events. Tatyana has become the fastest wheelchair racer in the world and is the first person to win the Grand Slam of major world marathons in one year (London, Boston, Chicago and New York). And Ruthi, 16, has just received her Girl Scout Gold Award for producing a coloring book to help elementaryschool students learn that people with disabilities can do anything.

Cheering from the stands as my daughters competed at the Paralympic Games in Rio this summer, I was thankful for the incredible opportunities that life has given me, and most important, for my family members who amaze me every day with their determination, can-do attitude and humanity.

What a happy life!

Deborah McFadden'79 continues as a disabilities advocate and is a sports agent who lives in Clarkesville, Md.

ONE CAMPUS. THOUSANDS OF POSSIBILITIES.



WE DO, The Campaign for Bucknell University, is helping students prepare for a lifetime of success on any path they choose. Tens of thousands of donors have already given more than \$415 million toward our goal of reaching \$500 million this summer.

There are still many great opportunities to support students in an area that is meaningful to you. Join us in making Bucknell the best version of itself for generations to come. Please visit bucknell.edu/WeDo to learn how your gift will make a difference.



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