

S P R I N G 2 0 1 4

LEHIGH

B U L L E T I N

AN ENDURING LEGACY

Celebrating the presidency
of Alice P. Gast







SPRING ARRIVES. FINALLY.

After a long and historically stormy winter—the snowiest on record in South Bethlehem since the 1993-1994 academic year—Lehigh's beautiful campus finally came to life in late April. Photo by Christa Neu



DAWN COOPER

Honoring Alice P. Gast

WHEN WE BEGAN WORK on this issue of the *Bulletin*, we knew we had a real challenge on our hands. After all, **Lehigh President Alice P. Gast**, whose tremendous legacy we examine in the pages that follow, has been a hugely successful and transformative leader during her time on South Mountain. It is safe to say, in other words, that she has built quite a legacy here.

But now, eight years after she was named our 13th president, she is leaving Lehigh to take over as President of Imperial College London.

In the pages that follow, we will take a comprehensive look back at President Gast's tenure at Lehigh—one that began with her issuing a challenge to the Lehigh community to set its sights high and pursue a better, stronger Lehigh than they ever thought possible. Suffice it to say, the university responded—and is better for it.

Other highlights from this issue include:

- A fascinating interview with **Costel Denson '56**, the first African-American ever to enroll at Lehigh. Denson returned to campus for a visit in April, and was gracious enough to sit down for an interview with the *Bulletin*. His sto-

ry is a truly powerful one, and well worth a read.

- Coverage of energy expert and Pulitzer Prize-winning author Daniel Yergin's visit to Lehigh in April. In a fascinating speech delivered in front of hundreds of attendees at Zoullner, Yergin explored the fast-changing, ever-dynamic nature of the global energy market.

- An interview with Georgette Chapman Phillips, the new dean of the College of Business and Economics; updates on the 150th playing of The Rivalry in New York City; your thoughtful feedback on our recent redesign, and more.

As always, I invite you to share your thoughts and comments. You can send your letter to the address at right, or email me at tih313@lehigh.edu.

Thank you for your continued support. And thank you again for reading the *Bulletin*.

Gratefully,
Tim Hyland, *Editor*

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LEHIGH ALUMNI BULLETIN

Vol. 100, No. 2, Spring 2014

Published three times a year by the Lehigh University Communications and Public Affairs Office, in cooperation with the Lehigh University Alumni Association, Inc.



LEHIGH

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Alice Gast, who was named Lehigh's 13th president in 2006, challenged Lehigh to aim higher than ever before. The Lehigh community accepted that challenge. *By the Bulletin Staff*

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His groundbreaking experience at Lehigh was marked by struggle, loneliness and even despair. But **Costel Denson '56**, the first African-American to ever enroll at Lehigh, endured through it all, earned his degree, and went on to enjoy a remarkably successful career in business and academia. Recently, he returned to campus to share his story with administrators, faculty and students. *By Tim Hyland*

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Why The Goose Matters

ON THE COVER: During her eight years as university president, Alice Gast helped Lehigh climb to new heights.

Photo by Theo Anderson

First Impressions and Lasting Traditions

Lehigh President Alice P. Gast reflects on her eight years on South Mountain, and how the traditions on which Lehigh was built continue to shape new generations of leaders for an ever-more challenging world.

ALMOST EIGHT YEARS AGO, when I wrote my first “From the President’s Desk” letter, I talked about Lehigh’s tradition of connecting across generations, its ability to foster mentoring relationships between faculty and students, and its success in bridging “theory to practice.” These were among my first impressions of Lehigh. Over the years, these first impressions have become lasting impressions of what makes Lehigh special and why great things are possible here.

There is a continuity of life experiences and excellence at Lehigh that is unrivaled in higher education. Perhaps the strongest tradition at Lehigh is the way we cause students to learn to think critically, to bring their knowledge to bear on open-ended questions, and to work together in diverse teams. Lehigh is known for providing the kind of education that produces leaders who do not shy away from hard problems and thinkers who find change exciting and challenges an adventure. Lehigh graduates are creative and entrepreneurial because of our interdisciplinary programs, our international experiences and the opportunities we provide students to use what they have learned in the classroom as a starting point for further discovery.

The stories alumni have shared with me are perhaps the best measure of the impact of a Lehigh education. I remember an alumnus working in the finance industry telling me that during the hardest parts of the financial crisis, he knew deep in his heart that he could dig down and get the work done. He said that the hard work and rigor of Lehigh left him with an inner confidence that he could work through even the hardest of challenges.

Another alum marveled at the leadership opportunities he was given. Leading University Productions allowed him to learn about choosing, recruiting and booking talented acts that would entertain classmates. The freedom to do that on his own, living with mistakes and celebrating successes, gave him the confidence to pursue entrepreneurial endeavors.

An alumna attributes her success to the many opportunities she was offered to push herself, in academics, sports and international experiences. Her service work in the South Bethlehem community was as important in shaping her as were the rigors of being a Martindale Scholar, and gave her the confidence to excel in challenging positions in far reaches of the world.

The Mountaintop program is Lehigh’s most recent and most exciting step in pushing students to take on leadership roles.

I believe that Mountaintop will transcend existing models in higher education by returning higher education to its roots—by focusing not only on the questions, and not only on the answers, but also on the processes that come before and after each: inquiry, exploration, discovery and insight. Mountaintop has the potential to establish Lehigh as the leader in what residential higher education can and should be in this era of ubiquitous information. This summer there will be more than 100 students at Mountaintop participating in the second pilot program. The range of projects demonstrates the diversity of thinking and interests among our students and faculty.



THEO ANDERSON

- “If Walls Could Talk” is a “smart spaces” project that will record the ambient information we give off through our non-verbal behaviors—and then see how an intelligent space might impact individual and collective moods and behaviors.

- The Shapeshifter is a transportable structure whose physical form shifts with human presence and invites play.

- A documentary will focus on pulling the past and future together in the story of Wisława Szymborska, the Polish Nobel Prize-winning poet whose life and work was shaped by World War II, the Cold War and the breakup of the Soviet Union.

- Students will propose and develop new ventilation strategies for the air that people breathe when they must cook indoors over wood or coal fires.

- Others will find ways to use affordable nanotechnology to remove pathogens from water.

I will visit Mountaintop many times before I leave and will follow its progress over the coming years. I encourage you to do the same and to share your good ideas for inquiry, discovery, creativity and exploration.

It has been my privilege to serve Lehigh and to work with you to further its excellence. Your support of this great university is evident in Lehigh’s leadership in student experience, academic excellence and global impact. Lehigh has a bright and exciting future.

Thank you for your love of this great university and for your kindness to me during my years of leadership.

Alice P. Gast

Gratefully,
Alice P. Gast, *President*

She Delivered the Extraordinary

Alice P. Gast excelled as Lehigh's President because of her brilliance, her enthusiasm and, perhaps most importantly, her great and enduring love for this University.

AS FELLOW ALUMNI OF LEHIGH UNIVERSITY, we share a common and powerful heritage—the experience of spending four years of our lives at this wonderful and vibrant University. Rightfully, we mark and count our time on campus as among the most compelling and transformative years of our lives. That is why we have so much affection for and attachment to all that is Lehigh. Our love for and loyalty to our alma mater is true and enduring, and we know that for those who did not have the great fortune to attend Lehigh, this love and dedication may be difficult to understand and an elusive experience.

In reflecting on the remarkable tenure and myriad accomplishments of Alice Gast as our 13th President, what resonates most is Alice's love and affection for all that is Lehigh. Love, affection and dedication equal to that of our most passionate alum. After all, Alice spent her eight years with us doing nothing less than pouring her very heart and soul into our University. As a result of her unyielding efforts, Lehigh has never been better positioned and is poised for unlimited achievement and excellence in the years and decades to come.

When the University had the great fortune to recruit Alice back in 2006, all at Lehigh knew, in a sense, exactly what we were getting: a brilliant academic, an extraordinary scientist, and a proven innovator in higher education. But in the course of her time with us, we learned that while Alice was certainly all of those things, she was also so much more. We came to know Alice as a compelling and tireless global ambassador for the University, as a visionary and inspirational leader, as a citizen-diplomat, as a caring mentor to students, and as a loyal supporter of and cheerleader for all experiential learning participants at Lehigh, most especially our student athletes and performing and creative artists. We also came to know Alice as a dedicated athlete (running barefoot up and down South Mountain or in Saucon Valley), as a denizen of South Bethlehem (foodie, shopper and great neighbor) and as a wife and mom. Multidimensional and extraordinary at multitasking, Alice has been for all of us a best role model and constant source of inspiration. And for me (as she is for so many others), Alice has been and will always be a treasured friend.

Now, of course, Alice is on the cusp of a new and exciting opportunity, and it is one that she richly deserves. I know she is so very excited about her future. But I also know—and I have seen firsthand—that her commitment to Lehigh has not wavered, not even for a moment, since we first learned of her decision to join Imperial College London. In fact, with each passing day as her departure has loomed closer, owing to her love for all that is Lehigh, Alice has redoubled her efforts on behalf of the University.

During her tenure with us, we asked Alice to do the extraordinary, and she gave us precisely that. She bolstered our reputation both nationally and internationally, she attracted brilliant faculty and ambitious students and she reshaped the physical campus.



DOUGLAS BENEDICT

With uncommon enthusiasm, Alice embraced the biggest challenges of the day and pushed all of us to think about how we could collectively work to make better both Lehigh and the world we live in. She had from the very start a clear vision of what Lehigh could be, and what Lehigh should be, and for eight years Alice worked day and night to make that vision a reality. She did all of this while respecting, embracing and championing the character and culture that is Lehigh's alone. In all, Alice has worked tirelessly to ensure that the goals, objectives, mandate and vision of Asa Packer are and will remain vital, vibrant and secure in the 21st century. Simply put, as we stand at the threshold of our next 150 years, with thanks to and by reason of Alice, we can be certain that Lehigh's future will be glorious and that dreams will continue to be realized and come to life on and at the top of South Mountain.

Alice will miss Lehigh, and we will miss her, but the fruits of her extraordinary labor and the warmth of her spirit will be with us and will be a part of us always—as a member of the Lehigh family and as a President that we will always be proud to have called one of our own.

Gratefully,
Brad Eric Scheler '74, P'05, P'08, PG'09
Chair, Board of Trustees

COLLEAGUES AND FRIENDS:

Brad Eric Scheler and Alice P. Gast at the donor plaque unveiling for the refurbished Linderman Library in 2010.

Correspondence

You offered your thoughts on our recent redesign. And yes, we listened.

ABOUT THAT REDESIGN ...

We were gratified to receive numerous letters in response to our last issue—both about our new look, and about the stories and content that filled our pages. Readers responded to stories both serious and fun, commented on our redesign (including the font size) and shared wonderful memories from their time on South Mountain.

We welcome your feedback and do read (and try to respond to) every letter we receive. We also take your comments into consideration as we continue our efforts to make this a magazine of which the entire Lehigh community can be proud. Toward that end, and based on your feedback on the last issue, we have adjusted our font size and spacing in order to make sure that our readers can continue to enjoy the Bulletin as they always have.

So keep those letters coming. They do make a difference. —T.H.

I'm responding to your invitation for comments concerning the Winter 2014 issue of the *Bulletin*—something I do rarely.

Before you read on, you should know two important facts about me to put my comments in perspective: I am a senior-senior citizen (Class of '49) and have worked in phases of typesetting and publication printing.

First impression (no pun intended): you have certainly managed to produce a fresh, new look, and a welcomed change from the same old/same old. There is a lot to like: content, innovative layout and the liberal use of color. For me, however, the small point size body type, wide columns and massive type area coverage presented a legibility problem and discouraged me from even trying to read many of the articles.

As the old saying goes, "Beauty is in the eye," and so I expect you'll get many kudos, as well you should. I just hope my few comments prove helpful and are taken with the constructive intent I wanted to convey.

Maybe I'll see you later this year at Yankee Stadium. Look for an old guy who is critiquing the printed program.

Bill Milanese Jr. '49

Just received my Winter 2014 *Lehigh Bulletin* and I absolutely love it. Great features, color, design, everything. A beautiful job.

One small issue with this redesign is the typeface you have chosen. For some elderly alumni (like me), the type is pretty small for 60-plus-year-old eyes. Consider a slightly larger font for us "old timers."

Thanks.

Robert Meeker '77

I'll keep this short, and hopefully sweet. I love the redesign of the magazine. Great work. Please express my appreciation to everyone involved—down to the last nutty campus squirrel.

Jacob Campbell '08G

You describe the goals for the new look of the *Lehigh Bulletin* as a "magazine that would look and feel classic yet contemporary, historic yet modern, literary yet cutting-edge." It may be contemporary, modern and cutting-edge, but in my opinion it is not classic and the magazine has lost the elegance that made it so easy and pleasurable to read.

I am not a typographer, but over the past few years I have spent quite a bit of time studying the elements that enhance the printed page, that entice people to read it. As you well know, a lot of typography has to do with the use of space. The titles of the articles in the *Bulletin* are set in an attractive font and are generously spaced. But the initial effect from reading the titles is greatly diminished by the layout of the text of the articles, which is produced in a very small font size and crammed together.

I appreciate all of the work that must have gone into restyling the *Bulletin*, but for me, this is just not appealing.

Jim Young '68



I congratulate you on the new design of the *Lehigh Bulletin*. Visually, it is beautiful, much better than its predecessors. I have always enjoyed reading the *Bulletin* from cover to cover. The Winter 2014 *Bulletin* seems to have many more interesting articles and on a wider range of topics than normal. Thank you for these improvements.

I must point out that I am still on my way toward the back cover. The *Bulletin* used to be a leisurely read of 1-plus hours. I found myself reading this issue in 15-minute time periods.

I think there is a tradeoff between the amount of articles you now have and the reduced font size. Even with my "best" glasses, I have to stop reading after a short while. And almost everything is printed in the same size font, so I can't go elsewhere to take a break.

Although there are many more readers of the *Bulletin* younger than I, and maybe not that many readers older, I still think many must share the same concern, and I wanted to pass this on to you.

Thank you for the "new" *Bulletin* and I wish you success in your new endeavors.

T. Allen Schneider '64

You have done a wonderful job with the redesign of the *Bulletin*. Sad that it had the notice of Alice Gast's leaving. She has done such a great job with Lehigh and is a lovely gal as well. She and Brad spent some time with my wife and I at our house in Martha's Vineyard one summer not long ago.

Keep up the good work.

Tom Rivers '49

FAMILY AND FOOTBALL

I really enjoyed the Winter 2014 *Bulletin*, in particular the last page—pictures of the footballs that document Lehigh wins. As a student, several times I went to Grace Hall to view the 1929 football of the Lehigh win over Lafayette.



That football, and that particular game, was a lasting memory for my father, Alan Cook. He attended Lafayette, graduating in 1932, and was one of Lafayette's great college athletes. He was captain of the football, basketball, baseball and tennis teams, and was a stand-

out player in those sports. In football, he played tackle, offense and defense, for the entire game, and also kicked the point after touchdowns, field goals and kickoffs. In the 1929 game, he missed both points after touchdown attempts, and missed a field goal attempt. Since he was such a great player, Lafayette alumni and fans were shocked that he missed all three kick attempts, and for years after that game he received hate mail and comments that to miss all three he must have fixed the game. He played in the first indoor football game (Lafayette vs. Washington & Jefferson) in convention hall in Atlantic City. He also told me that the toughest teams they ever played were always Lehigh.

As a kid growing up in Bucks County, he took me to every Lafayette-Lehigh football game, and most Lafayette home basketball games. When I became a student at Lehigh, it was the first time I sat on the Lehigh side for the Lafayette game.

He wanted me to attend Lafayette, but I always wanted to attend Lehigh. He was disappointed at first, but then became very proud that I completed my studies and graduated. He told me after I graduated that he always thought Lehigh was significantly more difficult than Lafayette, and much harder to complete the scholastic requirements.

Anyway, just wanted to pass along my comments. Seeing that football again brought back many thoughts of family and football.

David F. Cook '60

CRITIQUING AL-GHAZALI

The article "A Journey into the 'Proof of Islam'" in the Winter 2014 *Lehigh Bulletin* was fascinating.

I am surprised that the article did not mention that by using Islamic theology to reject Aristotle, Abu Hamid al-Ghazali effectively sent the Muslim world into the sad state it is in today—with the worst standard of living on Earth. In the 11th century, the Islamic world was scientifically and culturally centuries ahead of the Western world. St. Thomas Aquinas embraced Aristotle to explain that causal events and interactions in this world are the products of material conjunctions, thereby laying the foundations of modern science and technology.

In contrast, al-Ghazali taught that every event in the world is caused by the immediate and present Will of God. If God capriciously and directly causes everything, and if God is absolutely transcendent (i.e., above good and evil; i.e., not necessarily benevolent or logical), then the pursuit of science—with the goal of gaining knowledge about an ordered causal and understandable universe—is a hopeless and useless endeavor.

Finally, I hope Dr. Yaqub translates Ibn Rushd's work instead.

This is the great Muslim philosopher whose numerous commentaries on Socrates, Plato and Aristotle were burned in the Muslim world, but spread in Europe to inspire Aquinas and fuel the technological and cultural dominance of the West today. Granted, recently the West has almost forgotten Aristotle, as we have almost forgotten God.

So Dr. Yaqub, please give Ibn Rushd a chance to save us again.
Tihamer Toth-Fejel '76

BEFORE 'THE FLOP'

I enjoyed the article on high jumper Adeolu "Lou" Adesida in the Athletics section of the Winter 2014 *Lehigh Bulletin*.

I confess, however, that as a Lehigh high jumper during the mid-1960s, I related more to the archive photo in the Class Notes section (pg. 54) of the same issue of the high jumper from the (very) early days of Track and Field (circa 1890).

Unbeknownst to me, my picture high jumping for the Freshman Track & Field Team (below) was taken sometime during the Spring of 1964. I only found out about the picture when it appeared in the Lehigh weekly calendar for the school year 1964-65.

As noted in the caption under the picture of the 1890s high jumper, some things never change at Lehigh, but some inevitably do. In the picture of me high jumping, yep, that is South Mountain in the background. In the photos of the three high jumpers, however, the style of jumping has evolved from the Scissor Kick, to the Western Roll, to the Fosbury Flop. The Flop was becoming the accepted way to



jump late in my Track and Field career at Lehigh. I never did convert. As an engineering major, I had too many labs, ROTC, etc.

After graduation from Lehigh in '67 (B. S. Met Eng & Mat Sc), I spent two years in the U. S. Army doing crash damage analysis on aircraft, one year at a Naval Air Station in Texas, and the other on a ship off the coast of Vietnam. I took my GREs in what was then Saigon, came home with a Bronze Star for Meritorious Service and headed off to graduate school at Penn State using the G. I. Bill. While there, I endured antiwar demonstrations, but ultimately earned M.S. (1972) and Ph.D. (1975) degrees in metallurgy. Following grad school, I had a career with DuPont that spanned almost 30 years, largely managing corporate technical consultants. After retirement from DuPont in 2001, I taught graduate courses in Reliability Engineering at the University of Maryland, College Park, for several years. In 2005, I published a book entitled *Know Your Organization, How to Understand, Operate and Improve Your Organization in the New Business Environment* (Google it!). In August of last year, I retired (for the third time) from a part-time job in real estate sales and marketing.

Life is great, and I'm just getting started learning how to really appreciate it. As a closing, never forget that as a Lehigh grad, setting your goals high isn't just about high jumping.

Roy L. Schuyler '67

ON CAMPUS

NEWS FROM LEHIGH



RYAN HULVAT

Dean Wu Named Provost at George Mason

AFTER A 27-YEAR CAREER as professor and department chair of industrial and systems engineering, including a decade as dean of the P.C. Rossin College of Engineering and Applied Science, S. David Wu is leaving to become provost of George Mason University in Virginia.

Wu leaves a legacy of new interdisciplinary endeavors and professional master's degree programs that are tailored to global needs, and an expanded menu of research opportunities for undergraduate students. His inspiration came from a vision of "engineering as Renaissance thinking for the technology era," which he set forth when he was appointed dean in 2004 and reiterated this spring in *Resolve*, the engineering college's research magazine.

"David Wu," said Patrick Farrell, provost and vice president for academic affairs, "has been a major contributor to Lehigh as a faculty member and as a dean. We wish him all the best."

"I am thrilled to start the next phase of my career at George Mason," Wu wrote in *Resolve*, which he founded in 2006. "But I will miss Lehigh dearly. After almost three decades here, I owe my sincere gratitude to the mentors, colleagues, students and friends with whom I have worked side by side to build something truly special and distinctive. Together, I believe we have made a real and positive impact on the lives of young people."

Wu built on a foundation laid by previous Lehigh engineering deans, including John Karakash (1966-80), who often said, "Lehigh doesn't educate students in engineering but *through* engineering."

"Engineering has become a way of thinking that benefits leaders and innovators broadly," Wu wrote in *Resolve*. "An engineering education cultivates future leaders in business, law, medicine, architecture, design, journalism, public policy, environmental studies and of course, engineering and innovation."

"The remarkable support from my colleagues has enabled us to work toward a bold vision of the engineer as Renaissance person for the 21st century."

—Kurt Pfitzer

EXCELLENCE: DAVID WU'S DECADE OF DILIGENCE

The initiatives launched during Wu's deanship (2004-14) include:

- Undergraduate interdisciplinary programs in bioengineering, computer science and business, integrated business and engineering, sustainable development, entrepreneurship and IDEAS—the integrated degree in engineering, arts and sciences

- Professional master's degrees in analytical finance, structural engineering, healthcare systems engineering, energy systems engineering, and technical entrepreneurship

- The Freed Undergraduate Research Symposium, the Summer Research Fellowship program, and a Clare Booth Luce Foundation research grant for undergraduate women

FIGURE 1

45th/
193

David Wu's contributions as dean of the P.C. Rossin College of Engineering and Applied Science continue to bear real results. In April, U.S. News & World Report ranked the College's graduate program as one of the best in the nation, ranking it 45th out of 193 programs nationwide.



- The renovation of Lehigh's historic Packard Laboratory to serve as a destination point for students and visitors. New features include a media wall, a collaborative learning space and an environmentally controlled glass case for the 1899 Model A-1, the first car ever built by the Packard Motor Car Co.

- Improved recruitment and retention of women faculty with a grant from the National Science Foundation.

FOUR QUESTIONS WITH Michele Norris, National Public Radio


RACE MATTERS:
NPR's Michele Norris, who visited Lehigh in January, is the founder of The Race Card Project, an ongoing dialogue about race and identity in America.

CHRISTA NEU

1 How has your work in recent years—writing your memoir, *The Grace of Silence*, and running The Race Card Project—informed your style of storytelling?

In journalism, there still are rules that you need to follow. But after years of avoiding the word “I” in journalism, when I wrote my book about my family’s rather complex racial legacy, it crossed that line, and in doing so, it allowed me to open the door for the Race Card Project, where other people were telling their stories—not talking about race in the abstract but in the first person.

2 From Trayvon Martin to Jordan Davis, race is often a big part of conversations in the public sphere. How do those public conversations shape the dialogue happening though The Race Card Project?

The public conversation is often driven by events like the ones you mentioned, but what I see in the inbox is much more private. People are talking about their own experiences and observations. And it’s a much more intimate experience—the little, small moments that often have a very big impact on the way we experience race, or the way that we observe our own racial identity.

3 Through The Race Card Project, have you been compelled to think about forms of identity in different ways?

Very much so. Our submissions are about the frame of identity, and that frame is very different for lots of different people. For some of them it’s the immigrant experience, for some of them it’s the color of their hair, for some of them it’s age or gender, or the fact that they speak with a Southern accent, or the fact that they speak with an accent that is still redolent of their mother tongue. So there are lots of ways people experience identity.

4 You started college as an engineer, but eventually you decided to study journalism. Why?

I always liked to write. I had an internship as an engineer, and instead of deepening my understanding, it showed me that that was not the best thing to do with my career, and so I changed my major. My parents were a little freaked out, but they came around and they came to accept my decision to work as a journalist. My dad’s gone, but I think he was proud before he went to glory, and I’m certain my mom is proud today.

The Right Leader, at the Right Moment

Georgette Chapman Phillips, new dean of CBE,
on Lehigh and the future of business education.

LATE LAST YEAR, LEHIGH ANNOUNCED that Georgette Chapman Phillips, vice dean of The Wharton School of the University of Pennsylvania, had been named the new dean of Lehigh's College of Business and Economics (CBE).

A few months later, Phillips sat down in her University City office to chat with the *Bulletin* about her new professional challenge. It's a challenge she is clearly prepared to take on.

In a widely lauded career at Wharton, Phillips was credited with increasing the number of female and minority students at Wharton to historic levels, creating and implementing a senior capstone project, vastly expanding research opportunities for students, creating a new academic concentration in social impact and responsibility, and cultivating major gifts as part of University of Pennsylvania's \$4.3 billion campaign.

During a wide-ranging interview, Phillips talked not only about the highlights of her Wharton career, but also her views on the strengths of Lehigh, the challenges of business education in the 21st century and more.

WHAT ATTRACTED YOU TO LEHIGH?

It has an incredible combination of talented students, outstanding faculty and dedicated staff. Those are the three legs of the stool that you really need to have if you want an outstanding management education program. You have to have all three. And once I discovered Lehigh had that, everything else just kept getting better. The alumni are very involved and they have great ideas. I like the location, because I think there's a lot to be said for being in Bethlehem, and that's not only because of its proximity to New York and Washington but also for the work that the school can do in the city itself. All the ingredients are there, I think.

TELL ME ABOUT YOUR TENURE AS UNDERGRADUATE DEAN AT WHARTON. WHAT WAS THAT EXPERIENCE LIKE?

Being the undergrad dean at Wharton was where I really grew as an administrator. I came to really understand how a university functions, both from a financial and an administrative perspective. I came to love administration, too. One thing about being a faculty member is that you have control of that classroom, and you have control of your research. I do love my research but be-



RYAN HOLVAT

ing an administrator gave me the opportunity to effect change on a completely different level.

WHAT ARE YOU MOST PROUD OF DURING YOUR TIME AT WHARTON?

There are so many things I'm proud of, things that really changed the face of the Wharton undergraduate experience. I think we made Wharton and Penn a much better place to be a student.

One of the things I'm most proud of is the institution of a capstone project for Wharton seniors, and there are several reasons why I'm proud of it. First, at its inception, it was a student-generated idea. I worked very closely with the students on that because they told us they

THE NEXT

LEVEL: *Lehigh provost Patrick Farrell has said Georgette Phillips has "all the leadership attributes necessary" to take the college "to the next level."*



wanted something that would bring together all of their experiences. We went through many iterations—can we do this? can we do that?—and we eventually settled on a synchronous multi-round simulation that incorporated all facets of their business education. It was great from an administrative perspective, too, because it was something that we were able to build from the ground up. We weren't building on an existing program. It was about, starting from Day 1, thinking about how we should build it. Then, from a strictly marketing perspective, we had to tell these students, "Well, you're giving up your last winter break." Now, I had expected that these students would have said, "Are you kidding?" But instead, they really went for it. It was amazing how it all came together.

I DON'T BELIEVE YOU CAN BE A GREAT BUSINESS SCHOOL WITHOUT A GREAT MBA PROGRAM. OUR TASK IS TO FIGURE OUT WHAT IT WILL MEAN IN THE FUTURE TO BE A GREAT MBA PROGRAM.

—GEORGETTE CHAPMAN PHILLIPS

YOU HELPED WHARTON ACHIEVE ALL-TIME HIGHS IN ENROLLMENT AMONG WOMEN AND MINORITIES. HOW DID YOU MAKE THAT HAPPEN?

At Wharton undergrad, we were competing against the likes of Harvard, Stanford and Princeton, and very often, we'd be cross admitting against all three of those schools. So what I did was personally reach out to those students. I had a list of the top 25 to 30, and I would match them to a faculty member. We would create very personal relationships and work very hard to get those students.

But really, it starts even before that. I would get a big list of the top minority students interested in business, and I would have my faculty reach out to them, write them letters saying, "Please consider coming to Penn. We want you to consider us, and here's why we're a good fit for you." It's about generating a pool. You can't yield if you don't have a pool. Once we started doing this, our applications went up overall, but also among African-Americans, women and Hispanics.

WHAT IS YOUR VIEW OF HOW CBE SHOULD DELIVER BUSINESS EDUCATION TO ITS UNDERGRADUATE STUDENTS?

My belief is that undergraduate management education is not business school. Undergraduate experience should include the arts and sciences, the humanities. Those are four very precious years. And that's one of the things that attracted me to Lehigh, because I know that's how the other colleges view it, too. We have to be partners with CAS and partners with engineering. At Lehigh we have very strong academics across the board, and we can offer a really great undergraduate business education that will be complemented by the sciences, engineering and the liberal arts. The menu we can offer is really very strong.



STEM SUPPORT NEW GOVERNOR'S SCHOOL ANNOUNCED

Governor Tom Corbett announced in March that Lehigh will host the Pennsylvania Governor's School for Engineering and Technology (PGSE&T), one of the Commonwealth's three primary academic programs for talented high school students.

Lehigh joins two other prestigious institutions hosting Governor's Schools: the newly-designated Governor's School for the Agricultural Sciences at Penn State University in Centre County and the Governor's School for the Sciences (PGSS) at Carnegie Mellon University, which reintroduced the program in 2013 after a five-year hiatus.

The goal of the program is to encourage young talent to pursue careers in STEM (science, technology, engineering and mathematics) disciplines, thereby fostering global competitiveness in engineering and technology for Pennsylvania and the nation.

Said Alyssa Clapp, administrative director of the program at Lehigh: "Our goal is to develop a citizen-type engineer, allowing students to explore the technical aspects of engineering and how they can apply that to the world around them."

WHAT IS THE FUTURE OF THE MBA—BOTH NATIONALLY AND AT CBE?

The two-year residential MBA has been sliding for a while now. That's just not the way of the future. We have a strong part-time MBA program, but the question is where we really see that program going. What can we do to strengthen the MBA brand? I don't believe you can be a great business school without a great MBA program. Our task is to figure out what it will mean in the future to be a great MBA program.

ANYTHING ELSE YOU'LL BE FOCUSING ON UPON YOUR ARRIVAL?

One of the things I'll be focusing on is elevating the public face of CBE. I think that's a big hole that needs to be filled. I believe my job is to get out there and raise the public face of CBE—to make sure that we have the school's name on the tip of people's tongues, in the press, in public meetings, at conferences and symposia. I really intend to just keep pushing that name—the Lehigh CBE name.

—Tim Hyland



HONORS CBE IS RANKED WITH NATION'S BEST BUSINESS SCHOOLS

Lehigh's College of Business and Economics was ranked 31st in *Bloomberg Businessweek's* 2014 Ranking of Best Undergraduate Business Schools. In all, 132 schools were ranked.

The college finished among the nation's top business programs for the ninth consecutive year.

Lehigh once again scored highly in academic quality, finishing in 12th place. Based solely on student feedback, Lehigh was awarded an A+ for teaching quality and an A for job placement.

ACHIEVEMENT NOTABLE PROGRESS IN 'STEM' DIVERSITY HIRING

With the aid of a grant from the National Science Foundation, Lehigh has succeeded in its efforts to better identify, recruit and hire top women faculty in science, technology, engineering and mathematics (STEM) fields.

In the fall of 2013, Lehigh successfully recruited 12 new faculty in STEM fields. Of those, six (or 50 percent) were women, even though women made up only approximately 25 percent of PhDs in those disciplines, according to NSF statistics.

Lehigh's progress has not been limited to STEM fields alone. In fact, of the 27 new faculty members hired across all fields last year, 13 were women.

FIGURE 2



Since it was first launched in 2009, 114 Lehigh students have completed the *ire@l* program. They have since gone on to work and succeed at such top New York real estate firms as Cushman & Wakefield, CBRE and Mark Holliday's SL Green Realty Corporation.

The Value of 'Real Estate' at Lehigh University ...

... is on the rise with a commitment from The Holliday Foundation to advance Lehigh's *ire@l* real estate program.

ONE OF NEW YORK CITY'S TOP COMMERCIAL REAL ESTATE LEADERS, Marc Holliday '88, is always exploring ways to take commercial real estate ventures to the next level. Now, Holliday, who is the CEO of SL Green Realty Corp., has focused on Lehigh to advance the upward trajectory of real estate.

Through The Holliday Foundation that Marc and his wife, Sheree, created for charitable causes, the couple has provided a generous \$5 million gift to enhance the Integrated Real Estate at Lehigh (*ire@l*) minor program in the College of Business and Economics.

The \$5 million gift is comprised of two components. The Foundation's initial gift of \$3.5 million will further elevate this impressive minor by establishing The Marc Holliday '88 Professor of Practice and Director of the *ire@l* program. In addition to the \$3.5 million gift, The Holliday Foundation has made \$1.5 million available as a matching gift challenge to support the new Marc Holliday *ire@l* Operating Endowment Fund.

This challenge seeks engagement and commitment from other alumni and friends on a "two dollars for one" basis, with the potential to raise an additional \$3 million in matching gifts for the endowment fund. If the \$1.5 million matching challenge succeeds in attracting another \$3 million, then The Holliday Foundation's overall \$5 million gift will have raised a total of \$8 million in support of the *ire@l* program. The new endowed position will allow Lehigh to attract and retain a highly accomplished real estate professional to direct the *ire@l* program and to teach from experience. This position is critical for the long-term sustainability of the educational program while the operating endowment fund bolsters the student experience.

"I received an outstanding education at Lehigh, which is one of the nation's great universities," Holliday said. "It was the initial foundation for my professional success. The purpose of this gift is to recognize that and to enhance a program that will produce future business leaders."

The *ire@l* academic minor is the only one in the United States that allows any Lehigh undergraduate to minor in real estate—regardless of their major. Because students custom-make their own academic pairings with *ire@l*, the combination of their unique backgrounds and academic paths makes this a true cross-boundary experience that emulates the industry's everyday collaboration of diverse professionals. According to Stephen Thode, director of the Murray H. Goodman Center for Real Estate Studies, "This is what sets Lehigh's program apart from the rest." —*Dawn Thren*

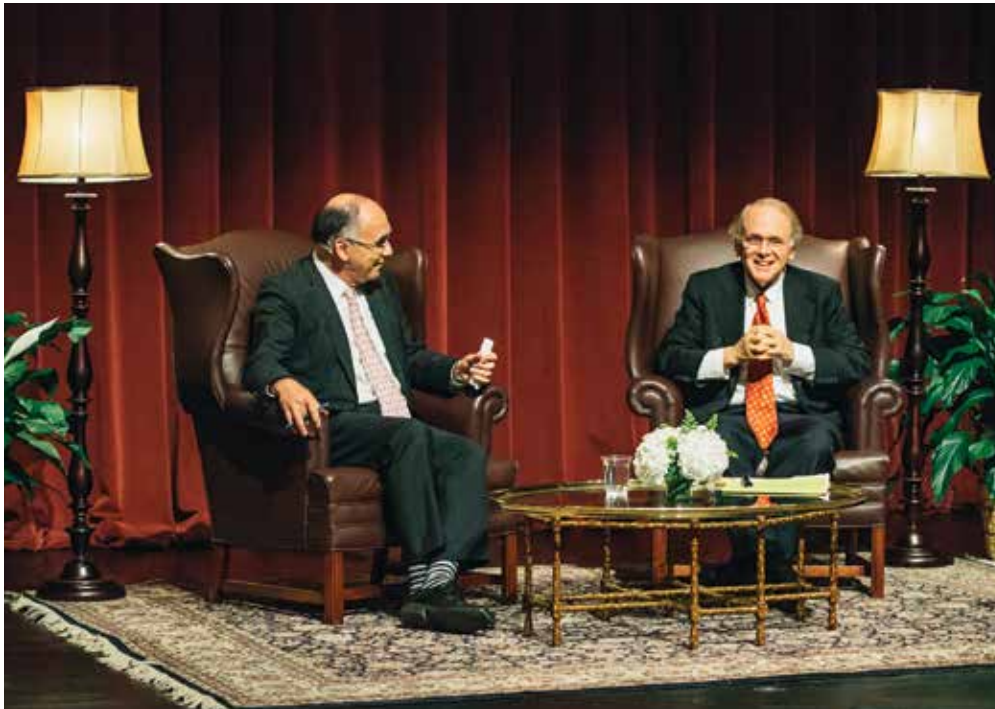


POWER BROKER:

Marc Holliday '88 has served as CEO of SL Green Realty since January of 2004.

The Surprising World of Energy

In an April lecture, Pulitzer Prize-winning author Daniel Yergin explored the dynamic, unpredictable global energy market.



critical importance to the world economy and for geopolitics.”

That’s especially true in the realm of supply, he said, where shale gas has become “the biggest innovation in energy so far in this century.”

Yergin explained that what began just a decade ago as a new way to produce natural gas has now turned into an “unconventional revolution.” Basically, the U.S. went from “a position of scarcity to a position of abundance.”

This breakthrough has had a miraculous impact—and that impact is being felt in many ways.

“Five or six years ago, we were going to spend as a country \$100 million a year to import Liquefied Natural Gas (LNG) because we were short

of it. Now President Obama says we have a 100-year supply here in this country and we are getting ready to export it.” By 2015 or 2016, he said, the U.S. will be ready to export LNG, and by 2020 or 2021, the U.S. will be one of the world’s three largest exporters of LNG, along with Qatar and Australia, he says.

A welcome effect of this revolution has been what Yergin calls a “manufacturing renaissance” in the U.S. Since natural gas in the U.S. is one-third the cost of what it is in Europe and one-fifth of the cost in Asia, the U.S. has become “a very attractive place to manufacture in a way that was not the case three or four years ago.” This translates into a lot of new jobs in the U.S.: over 2 million jobs have been created in the U.S. and, in Pennsylvania alone, 103,000 jobs were added in 2012. By 2020, that number will increase to 220,000.

Of course, energy is not only a commodity. It can also be a weapon, explains Yergin. When Russia exports gas to Europe, it’s technically a commodity, though Yergin noted “there’s obviously no question that when Mr. Putin and his colleagues look at Ukraine, their natural gas exports are being used as a political tool to achieve Russian objectives.”

But, he adds, the reality of the U.S. as an energy exporter is already filtering into political thinking and will give “a new dimension to American influence in the world.”—*Rosa Rojas*

THE ENERGY GURU:

Daniel Yergin’s April appearance at Lehigh was sponsored by Jeanne and Herbert J. Siegel ’50.

“IN MANY WAYS, LEHIGH IS CONNECTED to the energy world,” author and global energy expert Daniel Yergin said here this spring in an address at the Zoellner Arts Center.

Yergin was referring to the Lehigh alumni mentioned in his 1992 Pulitzer Prize-winning book *The Prize: The Epic Quest for Oil, Money and Power*. One of them is Ali al-Naimi ‘62, Saudi Minister of Petroleum and Mineral Resources; the other is Monroe “Jack” Rathbone ‘21, CEO and Chairman of Standard Oil.

His most recent book, *The Quest: Energy, Security, and the Remaking of the Modern World*, made it into Bill Gates’ Top Reads list for 2012, with the Microsoft founder saying that the book “changed his worldview.” The book, and the lecture at Lehigh, explored the recent changes in the global map of energy and how unexpected factors are driving these changes.

Yergin told the hundreds who attended the event in Baker Hall that the world is “living through a period of dramatic changes in energy” and that what’s happening in energy “has

INSPIRATION KUDOS FOR A GROUNDBREAKING PROGRAM

The physics department's summer Research Experiences for Undergraduates (REU) program, one of the oldest of its kind in the nation, was founded in 1983 and has received funding from the National Science Foundation for more than 25 years.

Recently, the NSF renewed the department's REU grant for five years with an award of more than \$700,000. The NSF



funding has enabled the department to give 25 students a year the opportunity to do original research with Lehigh faculty members and graduate students.

The competitive, 10-week residential program also receives support from the Jonathan Karas Educational Endowment Fund of the Karas Family Foundation. Sherman Fairchild Scholarships for research in solid state studies and electrical engineering also help fund the program, which admits rising juniors and seniors. "This program inspires undergraduates to become researchers," says Volkmar Dierolf, department chair of physics, "and it ends up helping physics and related fields as a whole."

The REU students pursue research in one of a dozen topic areas. In addition to their lab work, they take part in such outside activities as white water rafting, softball, cooking lessons and glass blowing.



RUDI KUHN

'Are We Alone In the Universe?'

Joshua Pepper believes we are closer to having the answer.

JOSHUA PEPPER, an assistant professor of physics who helped invent the Kilo-degree Extremely Little Telescope (KELT) a decade ago, has discovered seven exoplanets, or planets orbiting other stars, in the Milky Way.

He's confident he'll find more.

"As time goes on," Pepper told an Asa Packer Society audience in February, "we are going to ultimately answer the fundamental question, 'Are we alone in the universe?'"

Pepper built the first KELT telescope as a Ph.D. student at Ohio State University (OSU) and the second as a postdoc at Vanderbilt. The first instrument is now located in Arizona, and the second in South Africa.

Because the stars that KELT observes are so brilliant, Pepper did not need the kind of large telescope commonly used by astronomers. Although the KELT lenses are just 2 inches wide, they can precisely measure the brightness of millions of stars.

Pepper gave his talk, "How to Discover a Planet in 3 (Not So Easy) Steps," to 100 alumni and friends at the Franklin Institute's Fels Planetarium in Philadelphia.

Wobble and dip, he said, are two key identifiers in finding an exoplanet. A star's wobble is caused by the gravitational back-and-forth pull from an orbiting planet. A dip is caused when an orbiting planet blocks the star's light path to the earth.

For every 40 to 50 stars that the KELT survey identifies as possible exoplanets, only eight to 10 meet criteria for further examination. Pepper works with astronomers at OSU and Vanderbilt and from around the world to analyze KELT data with larger telescopes and try to determine if a planet is present. The curve of a star's wobble helps them verify that it is being orbited by a planet.

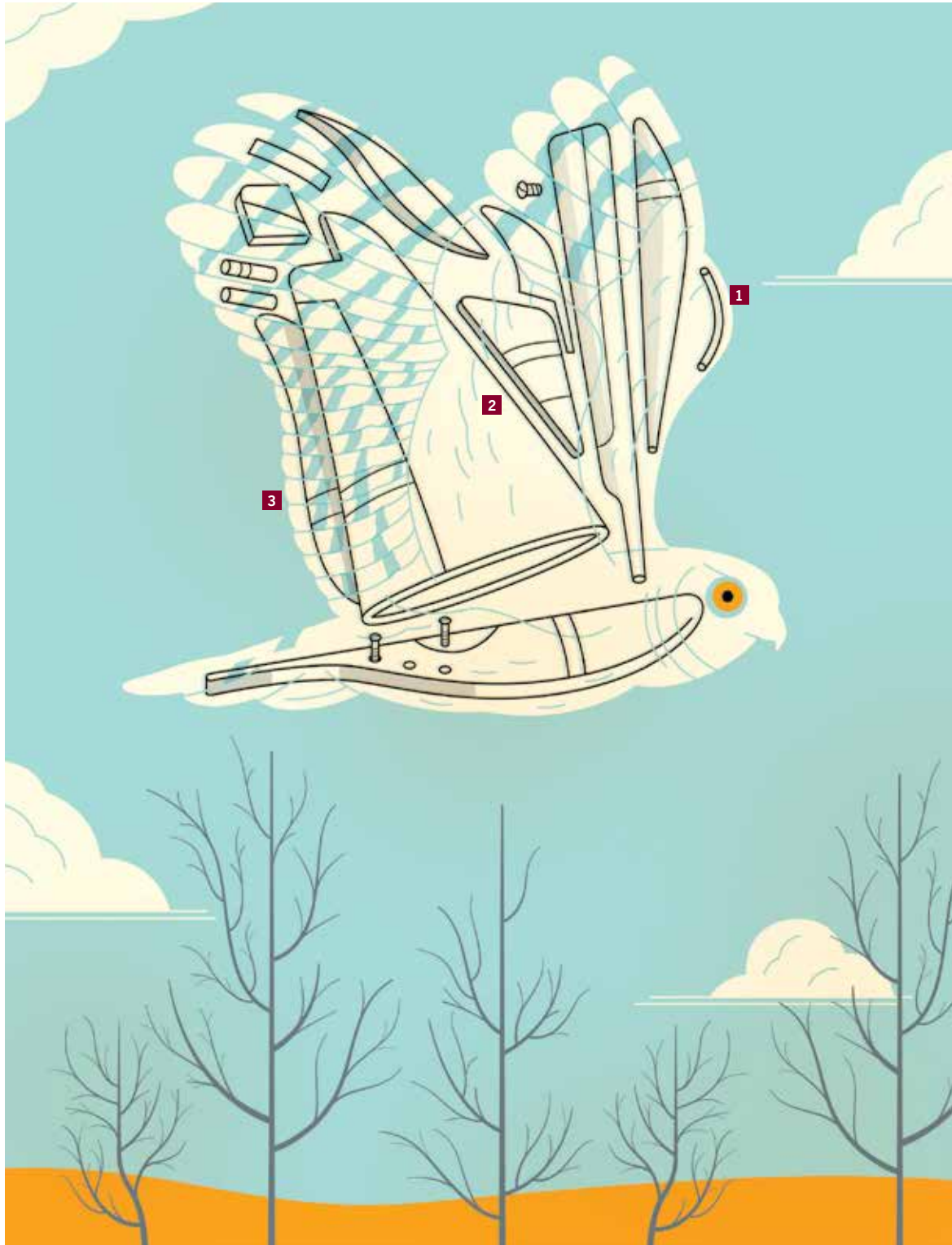
Astronomers have discovered at least 770 exoplanets in the last 20 years, Pepper said. Thousands of other candidates are awaiting positive confirmation.

Pepper is a member of the science team for the NASA Explorer Program's Transiting Exoplanet Survey Satellite (TESS), which is scheduled to launch in five years. Run through MIT and Harvard, the TESS program will help determine which stars are the best targets to find planets that could be probed for the presence of living things.—*Dawn Thren*



JOSHUA PEPPER, an astronomer and assistant professor of physics, conducts research focused on the discovery of extrasolar planets, which are planets that orbit stars other than our sun.

SCHEMATIC The Stealthy Owl Wing

**1 The Cutting**

Edge: The leading edge of the owl's wing, the part closest to its head, is made of stiff, evenly spaced, mostly aerodynamic fibers that reduce noise.

2 Plush, But Dangerous:

The wing's fluffy upper surface is made of a down feather material similar in texture to commercial velvet. Under a microscope, says Jaworski, this structure looks like vertical strings with interlocking barbs at their tops. This mesh creates a buffer layer that also stifles sound.

3 Flexible

in Flight: The owl's porous and compliant trailing edge, where the most noise is generated by any bird, may be the biggest key to its silent flight. In contrast to the stiff feathers on the trailing edge of a duck or eagle wing, the trailing edge feathers on a large owl's wing are flexible and provide significant noise reduction.

JUSTIN JAWORSKI believes the key to creating quieter airplanes, wind turbines and underwater vehicles may be found on the wing of an owl.

Jaworski, an assistant professor of mechanical engineering and mechanics, is studying the physics of owls' silent flight in hopes of one day

influencing the design of vehicles and technologies. Four years of research, he says, have convinced him that three key features account for the owl's ability to fly more quietly—and stealthily—than hawks, eagles and other birds of prey. —Carla Prieto '14



CAR CULTURE/CORBIS

Between Geometry and Probability

Robert Neel is Lehigh's resident expert in sub-Riemannian geometry.

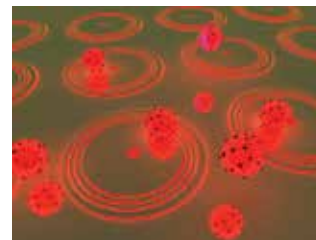
A FOCUS ON CURVATURE:

The motions of robot arms are one application of Neel's research.

PUBLISHED A DOUBLE PLAY IN OPTICS

Two electrical engineering graduate students recently published articles in major journals on their research in optical technologies. Beibei Zeng, a Ph.D. candidate, wrote in *Scientific Reports*, a *Nature* publication, that his group had more than doubled the transmission efficiency of plasmonic color filters (PCFs) by fabricating the filters on an ultrathin, 30-nanometer-thick silver film patterned with one-dimensional nanogratings.

PCFs are seen as a green alternative for the conventional color filters in TVs, iPads and other devices, which are typically made of organic dyes or chemicals, are costly to fabricate, and can be damaged by



heat and ultraviolet radiation. But their light-transmission efficiency is less than half that of conventional color filters.

Yongkang Gao, who earned his Ph.D. in January, reported in *Lab on a Chip* that he had improved the resolution of nanoscale biosensors to levels almost as sensitive as those achieved by much larger commercial systems. Biosensors utilize an electronic or optical system to analyze DNA, measure blood glucose content and detect biotoxins in the water or atmosphere. Gao, now with Bell Labs, contributed the cover art (above) for the journal.

The students are advised by Filbert J. Bartoli, department chair of electrical and computer engineering.

EUCLIDEAN GEOMETRY, the study of flat space, tells us that between every pair of points there is a unique line segment that is the shortest curve between those two points.

Two-dimensional ideas can be described by drawing on a flat piece of paper, but suppose instead of a flat piece of paper, you have a *curved* piece of paper. You might have a cylinder, or a sphere. Riemannian geometry, the study of curved spaces, is of particular interest to Robert Neel.

Neel, an assistant professor of mathematics, examines the numerous techniques employed in geometric analysis and probability, exploring geometric structures that have some degeneracy. The overarching theme to his work is the use of probabilistic methods, such as Brownian motion. The techniques, he says, apply to many mathematical problems.

"Surfaces in a larger space aren't generally thought of as degenerate, but from a probabilistic standpoint, Brownian motion along the surface is degenerate in a way quite similar to what you see in sub-Riemannian geometry," he says. "I've been focused on developing tools that provide a common method for several different problems, which is perhaps a little inverted."

Neel came to Lehigh in 2009 from Columbia University, where he was a National Science Foundation Postdoctoral Research Fellow. His research into sub-Riemannian geometry lies at the center of a collaborative effort with French scientists.

The motions of robot arms, or the act of parallel parking a car, employ sub-Riemannian geometry, and Neel's colleagues are taking his computations and utilizing them in practical applications. Sub-Riemannian geometry also has use at a basic level in understanding how human brains process information. The excitation of neurons in the brain mirrors a sub-Riemannian geometric structure, and researchers can model some neural processes with a sub-Riemannian setup, leaving the door open to countless future projects for Neel.

"Somewhere between geometry and probability, and some analysis, there are a lot of interactions that people certainly have explored, but not as systematically as I think it merits. There's too much left on the table."—*Robert Nichols*



ROBERT NEEL, assistant professor of mathematics, holds a Ph.D. from Harvard and came to Lehigh in 2009 from Columbia.

When a Reformer is Corrupted

A historian examines the life and legacy of José de Gálvez.



BARBARA ZEPEDA CORTÉS, assistant professor of history, conducts research into political culture, corruption, state reform, political social networks, nationalism and identity formation, and U.S.-Caribbean relations.

CORRUPTION WAS RIFE in the Spanish Empire of the 18th century, says Barbara Zepeda Cortés, and laws regulating it were as numerous as they were useless.

“The Spanish world had laws against appointing family members to office, against smuggling, against stealing money from the state treasury,” says Zepeda Cortés. “In practice, though, the enforcement of laws was not impressive, and corruption was everywhere.”

In 1765, King Charles III appointed José de Gálvez visitor general and dispatched him to New Spain (Mexico) to enforce the laws that were being flouted. Gálvez ended up being corrupted by the vast powers he was granted, says Zepeda Cortés, and his reforms were undermined by new excesses of favoritism and nepotism.

Zepeda Cortés, an assistant professor of history, has received a Paul J. Franz Junior Faculty Fellowship to write a book about Gálvez and his daughter and nieces. The most recent book about Gálvez, by Herbert Priestley, was published in 1916 and covers mostly his seven-year tenure as visitor general.

José de Gálvez (1720-87) became visitor general during the era of the Bourbon reforms, which had been initiated by King Louis XIV of France to strengthen the monarchy by creating state monopolies on consumer products. Gálvez established monopolies on tobacco, salt and gunpowder. He also organized a monopoly on playing cards and decreed later, as head of Spain’s colonial office from 1776 until 1787, that they be produced only in his small native village of Macharaviaya in southern Spain.

In seeking to enforce existing laws, says Zepeda Cortés, Gálvez ran into fierce local opposition. He appointed friends and family members to key posts, using his influence to install his brother Matias and his nephew, Bernardo, as viceroys of New Spain. He demanded higher salaries for his cronies and became himself the king’s best-paid minister.

“One motive for these higher salaries,” says Zepeda Cortés, “was so that ministers would not be tempted by bribes. But by appointing his



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brother and nephew to high positions, Gálvez ended up looking like the corrupt people whom he was trying to fight. He crossed an invisible line and was criticized by other ministers. After he died, there was a backlash and some of his reforms were reversed.”

Gálvez and his three brothers left a large fortune but few offspring. All were women. Josefa de Gálvez, José’s daughter, used her portion of the family inheritance to fight Napoleon and also to help her mother build a palace in Madrid that is now the Ministry of Justice. María Rosa Gálvez de Cabrera, Gálvez’s niece, became a poet and playwright with what some have called an early feminist point of view.

Bernardo de Gálvez had three children. Only Matilde survived; she married a Neapolitan and had three daughters. One married into a noble family in Naples. The other two never married and spent their fortune building a monumental church that, says Zepeda Cortés, is an “architectural treasure with a great view of Mount Vesuvius.”

Zepeda Cortés is conducting research in Spain and Italy. “Gálvez had this contradiction in his own life,” she says. “Reforms involved political strife. There was so much opposition, but in order to fight it, he had to create his own group. He squeezed the system like nobody had done before.”

—Kurt Pfitzer

Who Am I?

A student filmmaker turns to crowdfunding to help make her new project a reality.

LIKE MANY FILMMAKERS, Nadia Sasso '14G has faced the challenge of securing the resources necessary to complete her project. She's also overcome it.

Sasso, a graduate student in American studies who is also completing a certificate in documentary film, is the creator of *Am I: The Film*, which highlights the unique stories of women and their identity development, with respect to their West African and American cultural experiences.

Production of the documentary meant multiple trips to Sierra Leone—where Sasso's family is from—and Ghana to conduct interviews. She also needed to hire an editor and cinematographer. A Strohl Graduate Summer Research Fellowship from the College of Arts and Sciences helped Sasso cover some of her costs, but it wasn't enough. And that's when she really got to work.

"This project is extremely important to me," she said. "So I had to be creative and get the resources needed to finish."

To complete *Am I*, then, she created a profile on Indiegogo, a crowdfunding website which allows users to receive support from people around the world. On January 9, Sasso began her fundraising campaign and released a seven-minute trailer for the film. Six weeks later, on February 21, she closed the campaign after raising \$5,680, surpassing her goal by \$680. "The support has been great," said Sasso, who premiered her film at Lehigh on April 15. "It helped validate the fact that this story needs to be told."

In addition to *Am I*, Sasso has worked on two other films at Lehigh: *From Steel to Sands: Capital Exploitation* as part of the "Community Study through Documentary Film" course offered by American studies, and *The First Four*, a documentary highlighting four of the first five women appointed as faculty members in Lehigh's English department.

She credits Lehigh for giving her the freedom to pursue her dreams.

"Coming to Lehigh, American studies offered the closest program to an open-ended media concentration," said Sasso. "I'm able to build more media-related skills, so I can not only write, but keep up with the digital age and tell stories in a different way." —*Karl Brisseaux '11*



RYAN HULVAT



INSPIRATION MUSIC THROUGH THE GENERAZIONI

A two-day festival held this spring at Murray State University in Kentucky gave Paul Salerni the opportunity to do what he loves best—weave together the lines of his musical heritage.

Generazioni featured seven compositions by Salerni, professor of music at Lehigh; two by his former student Mike D'Ambrosio '96 '97, associate professor of music at Murray State; and one by his teacher, the late Korean-American composer Earl Kim. Salerni's son Domenic, first violinist of the Vega String Quartet in residency at Emory University, performed in six of the pieces.

Generazioni kicked off with a performance of *Autumn in Parco Querini*, a piece Salerni wrote about the park where he frequently ran while teaching in Vicenza, Italy, in 1994.

It concluded with Paul and Domenic playing the piano-violin version of Salerni's *Toddler Riffs*, which chronicles a day in young Domenic's life: constant play time, repetitive tantrums and eventual sleep.

Two decades ago, Salerni put together a similar festival at Lehigh for Kim, which was titled *Earthlight* after Kim's short opera and featured music from his disciples.

"I just love these ironies," he said. "I was 39 years old when I had *Earthlight* in Earl's honor. Mike is 39 now, and he just had *Generazioni* in my honor." —*Jaime DellaPelle '14*

FIGURE 3



Nadia Sasso '14G was one of the producers behind *The First Four*, a documentary that explored the stories of the first four women faculty in Lehigh's English department. That film won best short film in last year's Greater Lehigh Valley Film Festival.

PERSISTENCE: Nadia Sasso '14G used the crowdfunding site Indiegogo to help make her new film a reality.

EXHIBITION Creating 'Complexity'



THEO ANDERSON was asked by Lehigh President Alice P. Gast to photograph the B and C Buildings of the Mountaintop Campus last summer.

Anderson's haunting images captured the buildings before they were cleaned out, and while they still were home to relics left behind by former employees of Bethlehem Steel. Anderson later shared the images with the Lehigh community in *Complexity*, an exhibit hosted this spring in the DuBois Gallery.

"Mountaintop at Lehigh is an opportunity, an adventure, an inspiration," Gast said at a gallery talk for the exhibit. "It's about education. It's about taking risks. We are fortunate enough to see this through the discovery of a wonderful artist."

To see images from Anderson's exhibit, visit theoanderson.com/about-complexity/



DEBUT PRODUCING 'JEZEBEL'S LIPSTICK'

The development of any new theatrical production is a collaborative process between actors, the director and the playwright. Darius Omar Williams's latest professional project found him onstage in Minnesota last November helping to develop a new play.

Williams, assistant professor of theatre and Africana studies, was part of a workshop production of *Jezebel's Lipstick* at the Pillsbury House and Theatre in Minneapolis. *Jezebel's Lipstick* is the story of an evangelistic fall from grace of a reverend and his wife and probes the redemptive value of Christian faith. Staging the two-person show with just two days for rehearsals, the production brought Williams together with friend and fellow playwright Renita Martin.

"She trusted my director's eye as well as my choices as a trained actor. In the process of working through some of her edits, she was open to my suggestions in terms of refining some of the writing and cuts," says Williams.

The mainstage production was part of Pillsbury's Late Night series, which provides an opportunity for Minnesota- and New York-based artists to present their experimental work, works in progress and finished plays.

"It's invigorating for me to continue my work as a professional actor outside the university," he says. "It's very important to ... always contextualize any historical and/or theoretical material we discuss in class with practical experience. It enhances any classroom discussion for me to provide professional context while also highlighting personal experience as an artist."



JEFF GOLDBERG / ESTO

Lehigh, Live at Carnegie Hall

When Lehigh takes on Lafayette in New York City this fall, the occasion won't be just about football.

WHEN MEMBERS OF THE LEHIGH COMMUNITY GATHER in New York City next fall to watch Lehigh take on Lafayette in Yankee Stadium, they'll be treated to more than the 150th meeting of the nation's most frequently played college football rivalry.

On Friday, November 21, 2014, the night before the Big Game, the singers who make up Lehigh University Choral Arts will perform at one of America's most prestigious concert venues—New York City's Carnegie Hall. Accompanied by a full orchestra, Choral Arts will present *Carmina amoris*, a choral symphony composed by Steven Sametz, the Ronald J. Ulrich Professor of Music and director of Choral Arts. The nearly 300 singers and players will be directed by Sametz.

"When we take stage, we will show ourselves, in important ways, to be what we always are: singers coming together from all walks of life, all majors in the university, at levels from beginners on up, engaged in the common pursuit of making music at the highest level possible," says Sametz, who is now in his 35th year at Lehigh.

The Carnegie Hall performance will be an important milestone for the Choral Arts. Choral singing, beginning with the Glee Club, Lehigh's first organized singing group, has been one of Lehigh's long-standing traditions and will celebrate its 145th year in 2014.

The Lehigh community will host a number of festive events during The Rivalry weekend, including the Carnegie Hall performance. The celebration begins on Thursday, November 20, when representatives from the Lehigh and Lafayette communities will ring the closing bell at the New York Stock Exchange. The symbolic gesture serves two purposes: the formal closing of the day's trading session and the official launch of Rivalry Weekend.

Five miles north in Times Square, both colleges will host a welcome reception that evening. Rivalry Weekend will also feature walking tours of unique New York City landmarks, a behind-the-scenes tour of the United Nations, a performance workshop and several "leadership dialogues"—in-depth discussions of timely topics led by Lehigh faculty and alumni.

Registration for the weekend's activities opened May 1. For more information, visit lehighsports.com/rivalry150.

FIGURE 4



Choral Arts at Lehigh comprises four ensembles: the 160-voice Choral Union, the 60-member University Choir, an 18-member women's ensemble called *Dolce*, and the historic men's Glee Club.

LEHIGH IN OUR LIVES

AARATI AND PAUL MARTINO '95
BACHELOR OF SCIENCE, COMPUTER SCIENCE



For more information on how you can make a planned gift to Lehigh, please contact Lorraine Wiedorn '84G '13P '17P at (610) 758-4874.

Seeing Professor Don Davis' name in the newspaper, Paul Martino's mom called the Lehigh University math professor out of the blue when her son was in eighth grade. At the time, none of them could foresee how that call would impact Paul's life.

Professor Don Davis not only helped the young man with his fractal math project that year, but also mentored Paul throughout high school with his projects, was influential in his decision to attend Lehigh, and arranged for Paul to interview for Lehigh's Trustee Scholarship.

"Thankfully, Don got me the interview. I would not have gotten the scholarship if it wasn't for him," said Paul, managing director of venture capital firm Bullpen Capital.

Paul not only appreciates the guidance and education that Don provided him, but also what he is doing for other academically gifted high school students. So much so, that he and his wife, Aarati, support his efforts.

Since 1981, Don has annually held the Lehigh Valley Math Contest on campus hosting hundreds of the best "mathletes" from regional high schools. In 1993, the year after Paul competed, Don created the American Regions Math League (ARML) team and began taking the best of the best to the Mid-Atlantic regional competition. His first team had 15 students.

"Don's ARML program addresses a problem that Aarati and I had growing up which was we were smart kids with no idea of what to do," said Paul.

"This is giving these kids an outlet to be who they are."

Because of Paul and Aarati's generosity, Don now takes 75 students each year to ARML. Annual gifts from the Martinos; a matching gift from Aarati's employer, Google; and the recent establishment of the Aarati P. and Paul J. Martino '95 Endowment Fund are helping a program near and dear to their hearts.

"How many people can know someone like Don Davis and help support a great program like that?" asked Paul.



LEHIGH ATHLETICS

First at the Academic Finish Line

A long-distance runner and a discus thrower make the Academic All-Patriot League team.

LEHIGH MEN'S TRACK AND FIELD senior Ryan Knouse and junior Benjamin Beauchamp have been named to the Academic All-Patriot League team.

The Academic All-Patriot League teams are voted on by the league's sports information directors. To be eligible for the Academic All-Patriot League team or the Patriot League Scholar-Athlete of the Year award, student-athletes must achieve at least a 3.20 cumulative grade point average and be a starter or key contributor in their sport.

Knouse, a finance major and native of Perkasio, Pennsylvania, posted a 3.94 GPA throughout his four years at Lehigh. He made the Dean's List, earning at least a 3.6 GPA every semester, while also landing on the Patriot League Academic Honor Roll every year. Knouse finished fifth in the 10,000-meter race at the outdoor Patriot League Championships with a time of 31:55.78. He also ran the 5,000-meter race at the league championship meet and placed tenth. This is the first Academic All-League honor of his career.

Beauchamp, a native of Spencer, New York, holds a 3.74 GPA as an electrical engineering major. He was named to the Capital One Academic All-District Team in 2012-13 and was also a 2013 Academic All-Patriot League representative. Beauchamp earned second-team All-Patriot League status at this season's outdoor championship meet after finishing second in the discus throw with a launch of 50.07 meters. He also competed in the hammer throw and placed 11th.

HONORS:

Ryan Knouse '14 (left, front) and Benjamin Beauchamp '14 were tops as scholars and athletes.

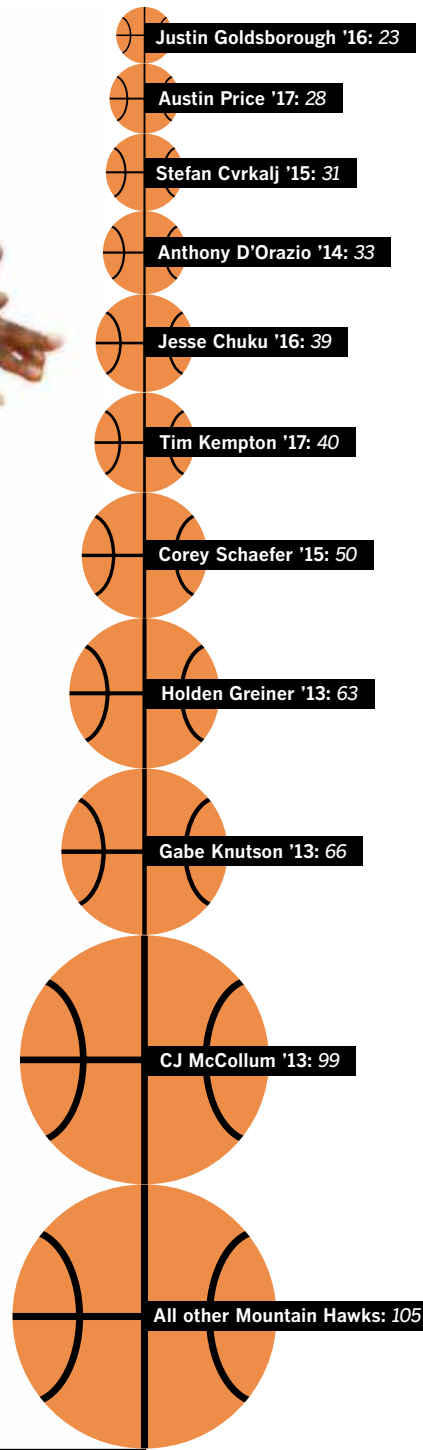
HIGH ACHIEVERS HIGH HONORS FOR KEMPTON, MCKNIGHT AND PRICE

After a successful debut season for the Mountain Hawks, Lehigh forward Tim Kempton '17 was named the Patriot League men's basketball rookie of the year. Senior guard Mackey McKnight and freshman guard Austin Price received All-League and All-Rookie honors, respectively.

Kempton, who averaged 13.2 points and 7 rebounds per game, is the fourth player in program history to win the award; Marquis Hall '10, Rob Keefer '08 and CJ McCollum '13 won in previous seasons. Kempton, a native of Scottsdale, Arizona, scored 10 or more points in 25 of 31 regular season games, converting 52.2 percent of his field goal attempts. Price, a sharpshooter who led Lehigh by making 51 three-point shots, joined Kempton on the Patriot League's All-Rookie team.

McKnight was named to the Second-Team All-Patriot League. He set the Lehigh career and single-season records in total assists, surpassing the marks set by Hall in 2010. McKnight averaged 6.2 assists in 31 games this year, ranking 12th nationally. He also led the team in scoring with 13.3 points per game. McKnight finished his career with 1,309 points, placing him 16th in Lehigh history.

STATS Lehigh's King of Assists



McKNIGHT'S FIRST ASSIST

led to a three-pointer by classmate Anthony D'Orazio '14, giving Lehigh a 20-11 lead with 5:52 remaining in the first half of a matchup with the Penn State Nittany Lions at State College on November 12, 2010.

McKNIGHT'S FINAL ASSIST

led to a Justin Goldsborough dunk with 4:04 remaining in a Patriot League tournament matchup with Holy Cross in Worcester, Massachusetts, on March 5, 2014.

CAREER HIGH IN ASSISTS

11 vs. Sacred Heart on December 1, 2013

3 CAREER DOUBLE-FIGURE ASSIST GAMES

11 (12/01/13 vs. Sacred Heart); 10 (11/12/13 vs. Rider); 10 (1/15/14) vs. American)

IN THE 2012 NCAA TOURNAMENT

McKnight's first assist led to a two-point jumper by CJ McCollum, in Lehigh's historic upset against Duke.

SENIOR POINT GUARD Mackey McKnight became Lehigh's all-time leader in assists in a February game against Bucknell, surpassing the former record of 566 held by Marquis Hall '10.

The New Orleans native finished his career with 1,327 points—good for 14th all-time at Lehigh—but his 577 career assists are what set him apart. Since he arrived on campus in 2010,

19 different Mountain Hawks have benefited from his generosity.

For an in-depth look at McKnight's record, the *Bulletin* enlisted the help of Ken Pomeroy, a college basketball writer and statistician, who broke down McKnight's career by the numbers—and revealed who was on the receiving end of the most of his dishes.

PROFILE A Dynamic Diamond Duo

Emily Brusher '15 (left) earned First Team Patriot League honors after leading the league in strikeouts in 2013. Morgan Decker '16 was named Patriot League rookie of the year and player of the year after winning the league triple crown that same year. In advance of the 2014 season, they chatted with the *Bulletin* about life, Lehigh and softball.



WHAT WOULD YOU SAY IS YOUR BIGGEST ACHIEVEMENT TO DATE (NOT NECESSARILY SOFTBALL RELATED)?

MD: My greatest achievement would be winning Rookie and Player of the Year in my freshman season, which is something I never would have thought I would do.

EB: My biggest accomplishment would be scoring over 1,000 points in basketball and having over 1,000 strikeouts in softball throughout my high school career. I've been told it's the first time anyone in New Jersey has done it but I, honestly, am not sure. I love this because it encompassed my two favorite sports.

FROM WHAT OR FROM WHOM DO YOU DRAW YOUR MOTIVATION?

MD: I'm motivated by my teammates and my family, but I am also naturally a very competitive person, so I would say a huge motivator for me is my hatred of losing. I want to be the best on the field every day in every at bat, and I think that is what keeps me motivated the most.

EB: I am motivated by my family. I consider myself to have two families; my blood family and my softball family. My parents and my sister have done everything they could to provide and give me the best childhood I could have imagined. They've sacrificed so much for me with sports and I am motivated to show them it was all worth it. There have

been so many great softball players, both present and now alumni that have motivated me. One in particular is Lisa Sweeney. She had an amazing career as a pitcher at Lehigh and now coaches at Princeton. She is also an amazing woman who has, probably unknowingly, motivated me to keep pushing forward and challenge her astonishing accolades.

MORGAN, WHAT'S ONE FUN FACT ABOUT EMILY? EMILY, WHAT'S ONE FUN FACT ABOUT MORGAN?

MD: Emily is a huge cat lover.

EB: A fun fact about Morgan is that she watches *Bull Durham* before the start of every season.

STEVE BOYLE



WHO WOULD YOU SAY HAVE BEEN YOUR BEST MENTORS?

MD: My parents, who have always supported me and who have always guided me through when I feel like I'm not playing my best. They always know what to say to lift my spirits and remind me who I am as a person and as a player. My upperclassmen and teammates are also mentors in the sense that I learn from all of them on a daily basis.

EB: I would say my biggest mentor would be my first softball coach. She taught me so much about the game, that it was so much more than physical. The first lesson she taught me was that the game of softball was 90 percent mental. Her first lesson has stayed with me until this day.

HOW DOES THE LEADERSHIP FROM ALL THE PLAYERS AND COACHES IN THE PROGRAM PLAY A ROLE IN SUSTAINING YOUR LEVEL OF ACHIEVEMENT?

EB: I think that everyone on our team knows their role and fulfills that role to the best of their ability, and that all starts with strong leadership by the coaches as well as the players on the field who make sure everyone is getting their job done. This understanding and organization is something that is key to all successful teams, including our program.

MD: It all starts with the type of girls coach strives to bring into the program. He knows that cohesion isn't just important on the field. He has recruited girls who have meshed and learned to become a family

off the field. I swear that's why we're so successful, because we live and die for each other on and off the field. The leaders in the past have paved the way for me and for those after me. I have learned how to approach situations and how to lead by example and vocally in my first two years, enough that a captain role was bestowed upon me. I am so honored to have this position this year and will continue to pave the way for leaders in the future. Our success, though, doesn't just come from the appointed leaders, it comes from the fact that the whole team strives to be leaders themselves. I truly believe that everyone in the program has developed a bond that nothing will ever compare to. Lehigh Softball is a pretty amazing program to be a part of.



A Transformative PRESIDENCY

Over the course of her eight years at Lehigh, **President Alice P. Gast** drove Lehigh forward—and changed the university for the better.

“Let us set our sights high.” ¶ That was the challenge laid out by Alice P. Gast upon her inauguration as Lehigh’s 13th president on April 13, 2007.

Eight years later, as Gast’s final semester at Lehigh comes to a close and she transitions into her new role as president of Imperial College London, it is clear that Lehigh under her leadership accepted her challenge—and is, as a result, a better place for it.

The evidence of this can be found everywhere. It can be found in the heart of campus, where the STEPS building stands as a testament to Gast’s commitment to sustainability, and it can be found atop South Mountain, where the groundbreaking Mountaintop project is redefining higher education in the 21st century. It can be found in communities across America, where students have completed scores of important service projects, and in developing nations across the world, where they are undertaking sustainability and entrepreneurship initiatives to enact real change. It can be found in Upper Saucon Township, where a vast new tract of land offers enormous possibilities for Lehigh’s future, and in South Bethlehem, where stronger bonds between the university and its community are making a measurable change in the lives of residents. It can be found in the historic financial strength of the University, and it can be found in the enduring commitment of Lehigh alumni to their alma mater.

Mostly, though, it can be found in the inquisitive, entrepreneurial, committed individuals who make up Lehigh’s campus community—the students, faculty, staff and alumni who accepted the challenge Gast issued eight years ago, and who have over the course of those eight years pushed this university forward in their own unique way.

In commemoration of a Lehigh tenure replete with accomplishments, the *Lehigh Bulletin* has compiled a retrospective of Gast’s eight years in office. It looks at how she pushed the university forward in four key areas—the student experience, academic excellence, the university’s global impact and Lehigh’s willingness to take on the biggest challenges of the day—and also makes clear the enormous impact Gast has had not only in creating the Lehigh of today, but in influencing where this university will be five, 10 or even 20 years into the future.—*Tim Hyland*



THEO ANDERSON, DOUGLAS BENEDICT

Alice P. Gast, her husband, Bradley J. Askins, and their two children, Rebecca and David, arrived on South Mountain in 2006. She was inaugurated the next year.

The **STUDENT** Experience

STUDENTS FIRST In an August 27, 2006, Convocation speech that served as her first major address to the campus community and established what would be an enduring commitment to the student experience, President Gast spoke to students about the responsibilities that come along with freedom, the importance of chasing their dreams, and the deep value of the relationships that they would make during their years at Lehigh. She also promised to make the student experience a top priority during her presidency. “One of the things that drew me to Lehigh was the university’s clear and unwavering focus on students. At Lehigh, our loyal alumni, outstanding faculty

and dedicated administrators are all equally and wholeheartedly committed to undergraduate excellence. We are dedicated to making your years here at Lehigh as productive, rich and valuable as possible. We are here because of you and for you.”

A CLEAR GOAL When Lehigh under President Gast’s leadership embarked on an ambitious, 10-year master campus planning process in 2009, the ultimate aim was to create the kind of campus spaces that maximize learning opportunities for its students. “Our plan clearly articulates a goal of creating an environment where the academic and living experiences merge into



an integrated learning experience,” President Gast said at the time. “As we seek to engage every student in the full breadth of opportunity available at Lehigh, we can use this opportunity to take a critical look at how our spaces can draw our community together in creative and productive ways.”

CHANGING THE CULTURE The first year of Lehigh After Dark concluded, and by all accounts, it was a massive success, offering students 45 new social opportunities to pursue on weekend nights. The program has become an important part of Lehigh’s efforts under President Gast to deemphasize drinking on campus.

“We are dedicated to making your years here at Lehigh as productive, rich, and valuable as possible. We are here because of you and for you.”

A NEW EXPERIENCE Lehigh in 2012 launched the LehighSilicon-Valley program, a one-week immersion workshop for Lehigh students near San Francisco, California. The unique program is coordinated by the Baker Institute for Entrepreneurship, Creativity and Innovation and has quickly become a signature program for the Institute. Said Tyler Walton '12, a participant in the program’s first year: “You gain more practical experience in one week than you do in a semester of lectures. The people we read about in normal case studies are suddenly in front of us, and we were in a position to ask them whatever we wanted.”

STEM SUCCESS In recognition of the 40th anniversary of undergraduate women at Lehigh, President Gast announced in 2012 the establishment of a new \$1 million endowed scholarship program to support women studying in the science, technology, engineering and mathematics (STEM) fields. The announcement was one of the highlights of the yearlong 40 Years of Women celebration at Lehigh.

A WIN FOR THE AGES In one of the most memorable moments in Lehigh sports history, the men’s basketball team, led by star shooting guard CJ McCollum, upset the mighty Duke Blue Devils, 75-70, in the second round of the 2012 NCAA



During her tenure, President Gast oversaw the completion of the Linderman Library renovation, the construction of the STEPS building and the official launch of the Mountaintop project.

From the Start, She Believed in Lehigh

How does one measure the impact of a great college president?

As one aspect in such an evaluation, we can try to answer the question with hard numbers—the traditional metrics of the business of higher education. We could look at fundraising totals, enrollment numbers and quality, faculty recruitment, the financial bottom line, major awards won and ranking successes achieved.

Undoubtedly, the university has excelled in these more traditional metrics during the past eight years of President Alice Gast's outstanding service to Lehigh. But as I reflect on Alice's tenure, I believe that her greatest achievement cannot be captured merely in one of those more traditional metrics. Rather, her greatest legacy is that in most everything she has undertaken since her arrival here in 2007, she has encouraged the university community to imagine a better, more dynamic, more impactful Lehigh.

In other words, she has raised the ambitions of the entire university. Because of this, Lehigh stands to benefit from her powerful leadership for years to come.



During her time on South Mountain, Alice has successfully raised our reputation both nationally and internationally, cementing our place among the leading institutions of higher learning in the world. She has created scores of new international learning opportunities for our students, ensuring that they will enter an ever-more global marketplace with precisely the kind of skills and cultural understanding they will need to enjoy long and successful careers. She has proven to be an adept fundraiser, helping us complete the largest campaign in university history while positioning us to enjoy continued success going forward, and she has strengthened governance structures that make Lehigh a more stable institution. She has led the recruitment of a wonderfully talented group of young and dynamic faculty, worked to improve the lives of the residents of South Bethlehem and, most recently, opened up wonderful new opportunities for our students with the launch of the innovative Mountaintop project. Of course, these remarkable and myriad achievements point directly to her great intelligence, vision and leadership skills. But they also point, I believe, to her great love for Lehigh.

Anyone who has come to know Alice appreciates that she really does love this place. Just as important, from the moment she first joined the Lehigh community, she really believed in it. In fact, I think she may have believed in it more than many did.

By inspiring the university community that, as great as Lehigh was, it could be even better, she pushed all of us to aspire to greater things. We did so. And today, we are a better university for it, well positioned to meet the challenges of the future. —*Daniel E. Smith Jr. '71*

DOUGLAS BENEDICT, CHRISTA NEU

men's basketball tournament. The victory sparked celebrations all around campus and put Lehigh's true scholar-athlete athletics model on the national stage. Wrote President Gast in an op-ed that appeared in the *Allentown Morning Call* afterward: "We admire them for the way they believed in themselves. Their incredible prowess on the court was only outdone by their intelligence and demeanor in front of the cameras. The rigorous education they receive at Lehigh and their demanding training were evident in their confidence and poise. We take their example as a reminder to all of us: Commit yourself to excellence, work hard, and believe in yourself."

UP ON THE MOUNTAIN In what might prove to be her lasting legacy at Lehigh, President Gast in October of 2013 announced that Lehigh had received a \$20 million gift from alumnus Scott Belair '69 to formally create the "Mountaintop Experience"—the reimagining of 120,000 square feet of former Bethlehem Steel research facilities into spaces for innovative and open-ended learning experiences for Lehigh students. Calling the gift a "defining moment" for Lehigh, Gast praised Belair's generosity and laid out a bold vision for what the space might eventually become. "Great spaces can serve as catalysts for progress," she said. "There are rare moments in the history of a university when an



Major gifts during President Gast's presidency include the creation of the Donald B. and Dorothy L. Stabler Endowed Scholarship Fund, the donation of 755 acres from the Stabler Foundation, the foundational gift for the Dexter F. Baker Institute for Entrepreneurship, Creativity and Innovation, and Lee Iacocca's International Internship program.

absolutely unique opportunity arises. This is one of those moments." The project launch drew plaudits from media nationwide and brought newfound attention to Lehigh. Wrote *Fast Company* magazine: "In an age where Massive Open Online Courses, or MOOCs, challenge traditional higher educational hierarchies by providing anyone coursework on a screen, the Mountaintop project is taking physical, collaborative learning environments and hurtling them into the 21st century." This past spring, Lehigh announced that 27 more projects would take place at Mountaintop during the summer of 2014.

REAL RESULTS A university's greatest obligation is to prepare students to succeed in the real world, and in that regard, Lehigh under President Gast is excelling. According to a 2013 report, of Lehigh's 1,020 bachelor degree recipients, verifiable post-graduation career activities were obtained for 88 percent of the graduates. This data was acquired directly from graduates, employers, university staff members, parents and LinkedIn profiles. The percentage, or knowledge rate, of similar data collected by other universities nationwide is 60 to 65 percent.

Lehigh Goes GLOBAL

SETTING THE STAGE In 2007, just after her arrival on campus, President Gast developed her strategy for "Getting to Global Lehigh," with the aim of creating a true global culture on campus. "We want internationalism to flow not only from formal instruction but also from day-to-day conversations, associations and friendships," she said of the initiative. "This includes providing meaningful international experiences for our students and welcoming more international students and visitors to our university." In the years since, Lehigh has offered an ever-expanding array of programs to allow students to study, work and conduct research abroad.

A QUANTUM LEAP In July of 2011, Lee Iacocca '45 pledged \$5 million in challenge funds to raise \$10 million for the new Lee Iacocca International Internships for Global Leadership, which combine global education with real-world internships. "Through Lee's vision and generosity, this gift will provide opportunities for our students to gain a deeper understanding of the unique challenges that exist in an interdependent and highly connected global society," President Gast said in announcing the gift. In the first three years of the program, more than 120 students have completed international internships, in countries as diverse as Malaysia, India and Kazakhstan.

Alice Gast's
LEHIGH

\$725M

total fundraising completed, including the \$500 million Shine Forever campaign, originally launched in 2004, plus another \$225 million during her tenure.

755

acres added to campus via the Stabler acquisition

50%

increase in Asa Packer Society membership

537

new endowed scholarships created

40%

of Lehigh students now have an international experience, and more than 1,200 participate in research

200

study-abroad programs now offered

63,000

hours of service contributed by the Lehigh community each year



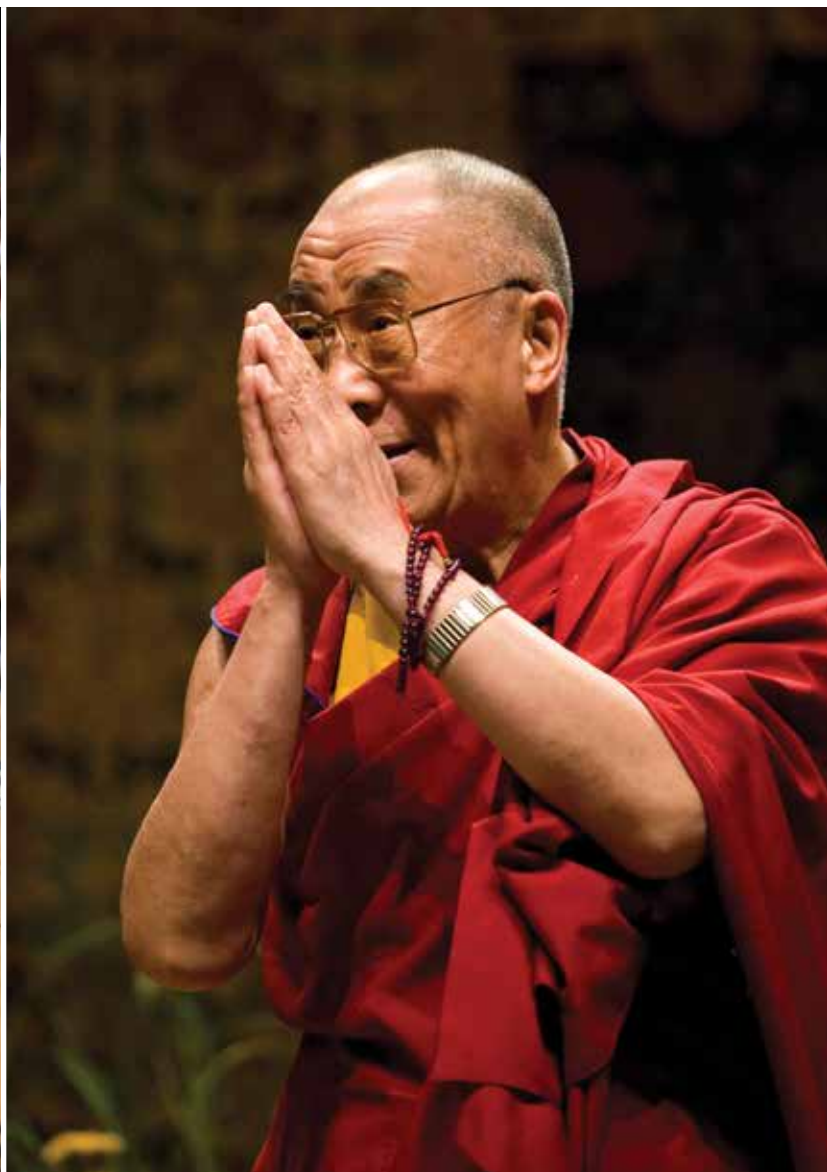
DOUGLAS BENEDICT, RYAN HULVAT, GOOGLE EARTH

GOING GREEN Following up on one of the main initiatives from her inauguration, President Gast in 2008 formed the Lehigh Environmental Advisory Group to identify ways in which the university could improve its impact on the environment while also studying the complex issue on a global scale. The move drew praise from around the university. Said Sudhakar Neti, professor of mechanical engineering and mechanics: "I'm very pleased to see that sustainability and environmental issues are receiving the attention they deserve from the university, and I'm glad that Lehigh is doing its part to reduce the impact carbon dioxide molecules have on the atmosphere."

"Everywhere I travel ... I see people looking to universities to produce the globally competent, highly educated workforce that we need for the future."

A GLOBAL FIGHT Lehigh University joined universities and colleges worldwide in signing the United Nations Academic Impact Initiative in July 2010. Lehigh was later selected to host the worldwide hub for Principle 6: Global Citizenship, and held a UN Conference on campus in 2012 to support the initiative.

LEHIGH FOR THE WORLD In her 2011 Founders' Day address, President Gast affirmed Lehigh's dedication to crafting a truly global view, and said the university would do so through integration, globalization and leadership. "Everywhere I travel, from Uzbekistan in Central Asia, to Moline, Illinois, in the Central United States, I see people



looking to universities to produce the globally competent, highly educated workforce that we need for the future. In Moline, they need a workforce able to take manufacturing to the next level of efficiency and the capability to produce goods, like John Deere tractors, in the United States. In Uzbekistan, they need educated innovators to build their economy on higher value-added goods beyond natural resources and agriculture. How will Lehigh answer the call? How will we meet these needs?"

AN INTERNATIONAL CAMPUS

By most every measure, Lehigh is a more global campus today than it's ever been before. Forty percent

of Lehigh graduates now have an international experience during their time on campus. Lehigh has 15 institutional memoranda and more than 49 agreements regarding research and student exchange programs, offers 200 study abroad programs in 40 different countries, and last year had 13 Fulbright scholars. The university is also a founding member of the U.S. Indonesia Partnership Program, and its United Nations Youth Delegate program has become a model for colleges and universities around the world. The program, which started at Lehigh, last year drew the participation of 400 students from 80 countries.

Grand CHALLENGES

DO MORE! President Gast set the bar high at Lehigh from the very start of her tenure. At her inauguration, she highlighted three initiatives on which Lehigh's special blend of talents, creativity and collaborative spirit could generate real results: The Environmental Initiative, The Global Islamic Studies Center, and a more concerted effort in the provision of healthcare in the U.S. Said President Gast of her health care initiative: "I believe we can contribute to new solutions and more effective provision of healthcare through our ability to define technology needs, patient demographics and our search for new therapies, which will always be at the core of a university's en-

agement in health sciences. But there is more that we can do."

A REAL STATEMENT In a move that hinted at what would become an enduring commitment during her presidency, President Gast in January of 2008 announced the creation of the Council for Equity and Community (CEC), then comprised of 14 members of the campus community who had demonstrated commitment to diversity through research, teaching, work or service. "Our goal in this initiative is to create an environment where we all work together, transcending racial, cultural, and other boundaries," she said at the time. "Our success in these efforts will lead



They were four of the biggest events of President Gast's tenure: the NCAA tournament victory over Duke, the Dalai Lama's visit, the first Academic Symposium, and the celebration of 40 years of undergraduate women at Lehigh in 2011.

us to a stronger community and a richer educational experience for all." Soon afterward, Lehigh's Board of Trustees formed a subcommittee on diversity, led by trustee Ralph Albert Thomas '76.

GOOD NEIGHBORS Lehigh in 2007 launched the South Bethlehem Development Study Group, which was charged with determining Lehigh's strategic approaches to the significant changes expected on the South Side. At the same time, the university officially created the South Side Initiative, which brought together the university community, the people of Bethlehem, government officials, experts and developers to learn about the Bethlehem

Steel site plans and address the needs of the community. The SSI has proven to be a tremendous success, and continues to help shape development of the South Side.

A BOLD MOVE At the height of the 2008 financial crisis, President Gast led the groundbreaking at the site of the STEPS building. The \$62.1 million facility covers 135,000 square feet, provides offices for 80 faculty, staff and graduate students, and features 50 research and teaching labs. It is part of an \$85 million initiative that encourages natural and social scientists to collaborate with engineers on problems in energy and environmental sustainability that are too complex

'Our Alice'

Alice Gast's tenure at Lehigh has been extraordinarily successful.

I will leave it to others to describe her achievements. As to these achievements, I would observe only that no one should have been surprised. After all, she came to us at a point in her career where it was evident to all that she had an unbroken record of high achievement as an administrator, researcher and teacher. High achievement *and* high standards.

I have a vivid recollection of my first impressions of Alice. Prior to her accepting our invitation to become our 13th President, Alice, with husband and young children in tow, came to campus for a visit. I met Alice, Brad, Rebecca and David at the Lehigh Valley Airport, and escorted them over to campus. During the course of the short car ride, I found myself on the receiving end of Alice's gently posed questions. These were questions that reflected far more knowledge of, and insight into, Lehigh than anyone could reasonably be expected to have acquired in a few short weeks.

During the course of that day, I became convinced that if we could persuade Alice to come to Lehigh, we would have a president whose goals for this university would challenge and inspire us, and ultimately, make Lehigh an even better university than it likely otherwise would be. It was also clear that we would have a president who would be a good listener, an inclusive and collaborative manager, a thoughtful and imaginative problem-solver, and a decisive leader. In the fullness of time, we learned that Alice is all of that. We also came to understand that our 13th President is an open, warm and caring person who adores students, connects effortlessly and effectively with faculty, administrators and alumni, and whose affection for Lehigh and fascination with higher education is palpable.

When Alice takes leave of us in June, she will be leaving a better, more vibrant and more elevated Lehigh than the one she came to lead in 2007. She will also be leaving a deeply appreciative Lehigh community that will take pride in her future achievements, as she will in ours.

She has become one of our own.

—James R. Tanenbaum '70



THEO ANDERSON, DOUGLAS BENEDICT, LEHIGH ATHLETICS



to confine to one field of study. Gast encouraged the Lehigh community to think boldly about long-term possibilities. “The uncertainties we face today remind us of how vulnerable we are, and they cause us to reflect on our core mission and our core values,” she said. “But this is not the time to retreat or give up. In fact, now is the time when, more than ever, we need to meet the challenges of the world and contribute real value to real problems such as energy, environment, infrastructure and resources.” Since it opened in 2011, the STEPS building has been certified as LEED Gold, a milestone achievement for Lehigh and for sustainability efforts under President Gast.

“We have tremendous momentum and are making a difference in the world through our teaching, research and service.”

EVER MORE ENGAGED On April 15, 2009, President Gast signed the Lehigh University Climate Commitment, affirming Lehigh's dedication to creating institutional policies and procedures to manage the development and implementation of a plan that affirms environmental protection and improvement. The signing made good on one of the promises President Gast made upon her arrival at Lehigh three years earlier. Student Alice Kodama '09 remarked at the time that the university's new leadership had played an important role in getting students more involved in important institutional goals, most especially those related to sustainability. “What's changed in the past three

years is the way the students have reacted to the administrators. When I got here, it was more of a rebellious attitude. People were rallying for change,” Kodama said. “Now, it's working very closely with the administration, and the administration has found the same level of respect for the students that we've found for the administration. We work together now. We're a unit.”

WHAT WE STAND FOR The Principles of Our Equitable Community, which detailed Lehigh's enduring commitment to creating a welcoming, open campus climate, were adopted by the Lehigh community and discussed during a campus-wide town hall meeting led by President

Awards & HONORS

- In October 2008, President Gast was named one of the top 100 “Modern Era” engineers in the country, under the category of “Leadership,” by the American Institute of Chemical Engineers.

- In June of 2010, President Gast received an honorary degree from the University of Western Ontario. Speaking to graduates at their 295th Convocation, she said: “Never before have educated people like you had so many opportunities to contribute so much, so please contribute.”

- In September of 2010, President Gast was selected as one of three new U.S. science envoys by Secretary of State Hillary Rodham Clinton. In the role, she was charged with encouraging U.S. global engagement in science and technology, and eventually traveled to the Central Asian and Caucasus regions, including Kazakhstan, Uzbekistan and Azerbaijan.

DOUGLAS BENEDICT, CHRISTA NEU

The LehighSiliconValley program is giving Lehigh students an immersive experience in America's technology industry, while the Broughal and Donegan school partnerships are offering crucial support for local students and families in South Bethlehem.

Gast in 2011. Said President Gast at the time: “This is an opportunity to acknowledge what we stand for and how we want to enact that every day.” The Principles would go on to become a hugely important reference point for all discussions on campus regarding diversity and inclusion.

EYE ON THE FUTURE Lehigh in 2013 announced the launch of a community school partnership in South Bethlehem with Donegan Elementary School. Two years earlier, Lehigh had launched a partnership with Broughal Middle School, also located on the South Side. Both programs aimed to expand opportunities for students in urban

schools by removing barriers to learning and generally assisting the schools with a variety of educational and health programs. Both have been great successes. “There is really nothing more important to our future and to our success, than our children,” President Gast said upon the Donegan announcement. “Lehigh University is committed to serving our community and our nation through effective collaborations in support of our neighborhood schools. We believe that the community school model ... provides tangible improvement in the educational opportunities for the children and families of our community.”

ENDLESS POSSIBILITIES

Lehigh's campus expanded in size by almost 50 percent—opening up almost endless possibilities for the university and its neighboring communities—as a gift of 755 acres in Upper Saucon Township was presented to Lehigh by the Donald B. and Dorothy L. Stabler Foundation in May of 2012. The gift was one of the most generous gifts in Lehigh's history, and one of the largest donations of land in recent higher education history. Wrote President Gast at the time: “This is truly an exciting time for Lehigh. We have tremendous momentum and are making a difference in the world through our teaching, research and service.”

- President Gast joined education experts from around the world at a conference at England's University of Nottingham in February of 2010. The Lord Dearing Memorial Conference provided a forum for accomplished educators to shape the debate on its future.

- In 2012, President Gast was elected to the board of directors of the Chevron Corp., one of the world's leading integrated energy companies. She also serves on the boards at the King Abdullah University of Science and Technology, Academic Research Council for the Singapore Ministry of Education, and New York Academy of Science, among others.



"I wish Alice and her family all the best going forward. She has left Lehigh in a good place, enabling us to build on her legacy. She traveled far and wide, carrying the Lehigh story with her, leaving a positive impression along the way."

—Joseph R. Perella '64



RESEARCH and ACADEMICS

A NEW TRADITION The inaugural Academic Symposium, "A Celebration of Research and Its Global Impact," was held in April of 2007, featuring five internationally renowned scholars as keynote speakers. The Symposium has since become one of the most important academic events at Lehigh.

PROVIDING SUPPORT Lehigh under President Gast has made great strides in its efforts to prepare its students for academic success. In 2011, the University created the Academic Transition program to assist new students with the challenges of university life, and in 2012-2013, a record 553 first-year students sought support from the

Center for Academic Success. This summer, Lehigh will also unveil a new Summer Scholars Institute for first-generation students.

WHERE BUSINESSES GROW Ben Franklin TechVentures, located on Lehigh's Mountaintop campus, was named by *Inc.* magazine as one of the nation's top ten "Start-up Incubators to Watch" in 2011.

TRUE LEADERS Lehigh launched the Dexter F. Baker Institute for Entrepreneurship, Creativity and Innovation in the spring of 2010 to actively foster and champion the entrepreneurial spirit at Lehigh and advance creativity and innovation for economic, cultural and social

development. It would earn a coveted spot among the nation's top 25 entrepreneurial programs later in the year and cement Lehigh's reputation as a center for entrepreneurship in higher education.

ENDLESS OPPORTUNITIES President Gast has overseen a vast expansion of research opportunities for students. In the 2012-2013 academic year, more than 1,200 students took part in research projects, 386 worked on faculty research, 55 received grants for their own work and 45 were supported by the Dale S. Strohl '58 Awards for Research Excellence in Humanities and Social Sciences.

AN ENERGIZED CAMPUS When President Gast announced the hiring of Patrick V. Farrell as Lehigh's newest Provost in early 2009, Farrell noted that the energy he felt on campus at the time was one of the things that most drew him to Lehigh. "My sense in talking to people on campus is that there's a real enthusiasm and optimism about not only what Lehigh has been, but what it can be in the future. And people are anxious to take that on." Farrell has been a key partner for President Gast, playing a large role in such initiatives as the Cluster Initiative, faculty hiring and the Mountaintop project.



HELMY H. ALSGAFF, THEO ANDERSON, DOUGLAS BENEDICT, JOHN KISH, IV, CHRISTA NEU

President Gast's influence and impact on Lehigh can be seen in the continued engagement of its alumni, its growing global profile and, perhaps most notably, in the ever more impressive achievements of its students.

“Difficult problems are solved through the creation of new knowledge and the education of students who can lead us in the future by applying what they’ve learned in the context of large problems and grand challenges.”

INNOVATION CENTER Lehigh in early May of 2010 received a gift of \$10 million from Daniel E. Smith Jr. '71 and his wife, Elizabeth Riley, to establish the Smith Funds for Research and Innovation in Science and Engineering at Lehigh University. “The Smith Family gift will have a transforming impact on Lehigh, fueling innovation and fostering a culture of intellectual entrepreneurship across campus,” President Gast said at the time. “These funds will allow us to translate great ideas into robust and sustainable research, significantly enhance our research productivity, and secure Lehigh’s place among premier residential research universities.”

CREATING LEADERS Speaking to *LEADERS* magazine in 2010, President Gast explained why Lehigh was so fully committed to developing future leaders. “We turn to our institutions of higher education to solve difficult problems,” she said. “They are solved through the creation of new knowledge and the education of students who can lead us in the future by applying what they’ve learned in the context of large problems and grand challenges.” That commitment continued until the end of her tenure, as in May of 2014 Lehigh launched its own LeaderShape program, a six-day experience that challenges students to explore identity development and inclusive leadership skills.

A PROMISE KEPT Lehigh announced a new Community Health faculty cluster from a pool of seven proposals in the summer of 2013. The interdisciplinary topic cluster, which followed the launch of clusters in Africana Studies and in integrated networks for electricity, aims to study the complex interplay among community members, their environments and the healthcare system at the local level. The creation of the cluster spoke to the success President Gast had in promoting the importance of healthcare at the time of her inauguration—and made good on her promise that Lehigh could and would “do more.” **L**



‘A Minority of One,’ Reprised

In the Fall of 1951, Costel Denson arrived on campus as the first African-American student in Lehigh history.

More than 60 years later, he returned to South Mountain to share his incredible story—one of inspiration and despair, loneliness and triumph.

To sit and hear *Costel Denson '56* tell his Lehigh story is to take a walk through the history of race relations not only on South Mountain, but in the nation as a whole.

Denson is the man, after all, who became the first African-American student to ever enroll at Lehigh. He did so in 1951—12 years before Martin Luther King Jr. led the March on Washington and brought the Civil Rights Movement into the nation's consciousness—and so, as one might imagine, Denson's time on campus was marked by more than mere academic challenge.

To put it simply, for four years here at Lehigh, Denson was alone.

Yes, he found family with the fencing team—a team that he would eventually captain—and he found family, too, in the African-American church in Bethlehem. He found mentors in the department of chemical engineering, and he found supporters in the university administration, too. But even with the support of a few, his time at Lehigh, inevitably, was never going to be easy. And it wasn't.

But he never gave up. Even when he wanted to, he never gave up. He wouldn't let himself.

Which is why he went on to earn his degree at Lehigh and his commission in the U.S. Army. It's why he later would earn a master's degree from Rensselaer Polytechnic Institute in 1960, and his doctorate from the University of Utah in 1965, both in chemical engineering, and it's

why he would go on to become one of the most respected minds in the world in the field of fluid mechanics. He enjoyed a long and successful career at GE, launched two companies based on technologies that he himself developed, and later returned to academia, serving as professor of chemical engineering, dean of engineering and Vice Provost for Research.

Notably, he also returned to Lehigh, during the 1968-69 academic year, to serve as a visiting professor in chemical engineering. That year, the university was home to 28 African-American students, and at the conclusion of his visiting tenure, Denson wrote a piece for this very publication, reflecting on his two stints at Lehigh and offering his thoughts on how Lehigh might better serve the African-American community and live up to its mission. It was titled, “A Minority of One.”

In mid-April, Denson returned to campus to meet with administrators, faculty and students. He was here to share his story, his perspectives and his words of wisdom with those who make up the Lehigh of today, and he was kind enough during his time here to sit down for a lengthy interview with the *Bulletin*. During an hour-long interview, Denson told what can only be termed a wholly unique and truly inspirational Lehigh story—one that offers a sobering look back at both America in the mid-20th century, and at one man's difficult, lonely and inspirational journey.

A LEHIGH PIONEER:
Cos Denson arrived at Lehigh as the University's first African-American student in the fall of 1951.

Where did you grow up?

I grew up in Western Pennsylvania, in the Beaver Valley. It was steel country, a town called New Brighton. Everyone was hardworking, and it was a mixed community. We had black folks, Irish folks, Italian folks, Eastern Europeans. We all got along pretty well. Of course, it was sectionalized, but when it came to football, we all played together, and we all did very well. That was the binding element in the community—the football team.

What did your mother and father do for a living?

My mother was a housekeeper for a wealthy family, and my father was a millworker. Neither of them went to college, but my mother later went on to become a licensed practical nurse. She did that in the later stages of her life. But she also had great musical talent. She was the church organist for something like 30 years, and as her son, I had to sing in the church choir and behave. But I did have some good talent myself. I started playing when I was 5 or 6 and I studied music for about 12 years, and I was looking at a career in music. Remember, this was the 1940s, and what kind of jobs could you get back then if you were a black man? Well, one of them was to be a musician. So my junior year, I applied to Oberlin College, and was granted early admission, and I thought that was that. I was just studying hard and playing football.

So what changed?

But then during my junior year I took a chemistry course, and one of the teachers was one of the assistant football coaches. He was kind of a rough guy. One day we were sitting in class, and we were given an assignment that was supposed to take two or three hours. Well, I polished it off in about 30 minutes and then I was sitting there wondering what to do. I told the teacher, “Coach, I don’t have anything to do here.” So then he handed me this magazine. And I tell you, I read that magazine for the next two years. It was called *Chemical Engineering*. I just fell in love with it and said, “This is what I want to be.” Of course, everyone thought I was nuts.

How did you change their minds?

They said there was no way I was going to end up a chemical engineer. But I persisted. I ended up applying to the Carnegie Institute of Technology, Lehigh, MIT and the Case Institute. Now, in high school, I was a big star football player and a good scholar. I graduated fifth in my class. I was president of the science club and all kinds of other stuff. So one day I’m sitting in class and I was

instructed to go down to the principal’s office. Everyone froze, because of course, you only get called down to the principal’s office if you’re in trouble. I’m thinking, “What did I do?” When I entered the office, they handed me the phone, and I picked it up and the man’s name on the line was (former Lehigh vice president for advancement) Paul Franz Jr. He said to me, “I’m going to be in Pittsburgh tomorrow, and I’m wondering if you could meet me there.” Now, I didn’t know where I was going, but the next day I caught the bus and found the building he said he would be at. Out comes this man with these two elegant women—they were the Dravo sisters—and we all went into this other room. We talked for an hour. They were asking me all of these questions. And then I went back home. I had no idea what was going on—I just thought it was all strange.

But obviously, something was up. What happened next?

Ten days later, of course, I received this big thick letter from Lehigh saying, “We are granting you admission, and we’re giving you a Dravo scholarship.” I didn’t have to play sports or anything. They would cover my tuition, room and board, and I would get some spending money, too. They were only giving out ten of those scholarships, and I was getting one of them. Now, around the same time, I had been admitted to MIT, but I hadn’t received as good an aid package, and I told my parents that’s where I wanted to go. They said, “No you’re not. You’re going to Lehigh.”

What can you tell me about your first days here?

Eventually the day came for me to depart for Bethlehem. My father bought me a plane ticket for \$17, and I boarded the plane and was just totally wacked out. I hadn’t ever been on a plane before. We landed in Easton and I grabbed a taxi to campus, and I eventually found where the admissions office was. I went down and obtained my key and then found my room and started unpacking. I was still scared to death. I had never seen anything like this campus in my life.

In those days, all of the freshmen had roommates, and there was a lot of activity that day as all of the students started moving in. So I’m waiting for my roommate, and nobody ever comes. After a couple of days, I go down to the Alumni Memorial Building to see the vice president of student affairs. I found him and said, “Sir, I’m a bit worried. My roommate hasn’t shown up yet, and I’m worried something may have happened to him.” Well, that’s when he told me, “Cos, we’ve never had a colored per-





CHRISTA NEU

DR. DENSON: Denson enjoyed a long and successful career in industry and later served as professor of chemical engineering and vice provost for research at the University of Delaware.

son here before. You're kind of an experiment, we're not sure how it's going to go, and so you are going to have a private room." I was crushed. I walked back up to my room and called home, and my parents asked me what was going on. I told them, "I can't deal with this." I mean, I had just turned 17. So then my father said, "OK, Cos, just come on back and we'll get you a job in the steel mill." And I realized, well, I was going to have to make it work. I was just scared to death. But I knew I had to make it work.

How did you make it work, then?

During the first week of classes, I remember that Lehigh hosted a demonstration for all of the different activities you could participate in on campus. It was in the old Taylor Gym, and I remember seeing a demonstration by the fencing team. I thought, "Well, this looks like fun. I'm going to figure out what this is all about." All of the guys were just super nice. They really welcomed me in, and they told me what nights they held workouts and invited me to come work out. I met the coach, and he ended up

giving me private lessons twice a week. I really worked at it. And as it turned out, that was my saving grace—my family. Come November, the coach had to pick the varsity team, and he only took nine guys total, and when he picked the team I was No. 3 in the saber. I ended up fencing all four years at Lehigh. I earned four varsity letters and was captain during my fourth year.

When it came to academics, did you find that you struggled at all making the transition from high school?

There was a learning curve, yes, but mostly it was analytic geometry and calculus that gave me the hardest time. I had a room by myself, of course, so I was able to hit the books really hard. I aced those and couldn't believe it, and after that, I was OK. I finished the semester with a really decent average.

What were your social interactions like? Did you receive any difficult treatment?

It was an issue sometimes when I walked around campus. Some students, I noticed, would cross the street. But for the most part, the students didn't really bother me. One of the biggest heartaches I had came at rush time. Rush was going on and there was all of this activity all evening long, there was all of this noise in the hall, and I kept waiting for somebody to knock on my door, and of course that never happened.

And that's one thing I wanted to talk about. When I came there, there was no Martin Luther King Jr. There was no Civil Rights Act. So what happened here at Lehigh—I really don't know why it happened. They weren't forced to do it. So what I eventually concluded was that there must have been several factors that all had to be working in concert with each other to make this happen. Everything had to be in alignment. The trustees could have said no, and for all I know, some of them did. The president had to be lined up behind it. The administrators had to be lined up behind it. Many of the faculty had been pushing for something like this for many years, and I think that was obviously a very positive thing. All of those elements had to be working in concert to have made this happen. Anybody could have vetoed it, but they let it happen. And they provided financial support, too.

Did you find the faculty to be supportive?

When I was a student here, I have to say, many of the faculty were very supportive. During my junior year, I could barely breathe. I was in really bad shape and had just about had it. It was tough enough doing the work and solving the

problems. But to just be alone all the time? It was really a burden for me. It became very oppressive.

I remember I was sitting in a lecture one day, and we were learning all about these technical terms you need to know as a chemical engineer. We were talking about how, if you were working in a factory you might have all of these quantities of materials coming in, and then in the middle of the lecture the professor says, “And this is where you need to find your [n-word] to unload all of this stuff.” I just shut down. That’s just one occasion I had to deal with. And I thought after my third year I just could not take it.

How did you cope?

So I started to act out. I started to act out a lot. Was partying too much and all of it. Eventually, the chairman of our department, Alan Foust, who was a big, 6-foot-6 Texan with this deep voice and Texas drawl, called me in to his office and just flat out told me, “The rumor is you’re out partying too much. Do you want to blow everything?” And I tell you what he did next: He called my parents back in Western Pennsylvania and he told them what was going on. Then he asked them, “Would you please come out here? I want to talk to you, in front of him.” And I remember sitting in his office with my mother and my father, and my father just laced me out. I mean, he really tore into me. I got it back together after that. I made it through the semester.

It must have been tough, though. Who supported you?

I had the support of Prof. Foust, the big Texan, and I had the support of another faculty member, who invited me over to his house one day and told me, “I know you’re struggling. Let me help.” And that helped a lot. The last thing that helped, I think, was that the summer after my junior year was the summer that I went to ROTC summer camp. I remember we were standing in lineup, and the commanding officer and the lieutenant colonel came over and asked my name, and when I answered, they said, “Oh, we’ve heard about you. We’ll see if we can’t change that.” And they did. When I came out of that camp, I was just a different person. I was ship-shape. But I think the biggest difference was Foust—he picked up the phone and made that call to my parents. And my father listened to that big Texas drawl on the phone, saying “Cos is acting out, and he’s going to fail.” But in the end, I survived. I received my commission and I survived.

A lot of this resurfaced when I came back for my 50th reunion. We had a big dinner that night, and a classmate of mine, Harry Levine, gave a speech. He had called me about a month before that, and he said he was going to give a speech and he wanted to ask me some questions for the speech. And so at the dinner he’s giving this big speech about Lehigh, and right in the middle he started talking about me, and how he felt now, looking back on those days, that he realized that I must have been very lonely. It was a wonderful speech. Then he asked me to stand, and I did, and it all came back.

I have to ask: Lehigh gave you a great opportunity, and gave you a platform on which to build a wonderful career. But your time here was also very difficult. So what are your feelings for Lehigh today?

I love it. I actually created a scholarship, and the scholarship was for students who were going to major in chemical engineering, or an offshoot. It has nothing to do with race. I had a tough time but when I created the scholarship, it wasn’t just for black students, it was for excellence in chemical engineering. That’s my statement. And to me, it’s a powerful statement. I think it says a lot that I would do that—that I haven’t closed that door behind me.

Lehigh is still dealing with issues related to diversity, and is working to make the campus a welcoming place for all students. I am wondering what your thoughts are about where Lehigh is, and what it can do better.

Sometimes as I read through the *Bulletin*, I look at all of these alumni with all of the letters after their name—Joe Smith, ’70, P’90 and so forth. But I think that’s an important thing that is missing with minority alumni, and I wonder how many minority alumni end up sending their children here. What’s the legacy? I don’t see it very often. And I think that’s one metric I would look at—what is the comparison of the white children and grandchildren of alumni here vs. the minority children and grandchildren here? Maybe that’s what needs to happen. Maybe we have a situation where prospective minority students are saying, “My father and mother went there, and they had a hard time, so I’m not going.” You’ve got to fix that. What do we do to make it so that our minority graduates say to their kids, “You’ve got to come here?” **L**



FLASHBACK: Denson penned an essay for the Fall 1969 issue of the *Bulletin* about his experiences at Lehigh.



That’s the Spirit!

Robert Wolfenden on the growing opportunities offered by the ‘Lehigh family.’

ON APRIL 26, my wife Valerie and I celebrated our 33rd wedding anniversary. With a pub crawl.

I know what you’re thinking: Bob, you are *such* a romantic! But before you judge me, you have to know that this wasn’t just *any* pub crawl. It was the Fells Point Haunted PubWalk, hosted by the Lehigh Club of Baltimore.

Granted, it wasn’t champagne and roses, but Val and I agreed that there was no other way we’d rather celebrate this milestone than with our Lehigh family. The event was coordinated by **Bobby Buckheit III ’09** (who incidentally just received our Regional Volunteer of the Year Award during Alumni Weekend) and his wife, **Krista Bellick ’11**, who have brought new life to the Baltimore Club with their commitment and enthusiasm. The PubWalk itself is co-owned and operated by a Lehigh alum: **Amy Lynwander ’91** has been introducing visitors to this amazing neighborhood for more than 14 years through her unique tours. Val and I had a great time.

And yes, I’m pretty sure I saw a ghost.

Not everyone would choose to connect with the “spirit” of Lehigh in such a literal way. But I share this story not only to thank and celebrate our club volunteers, but to remind you that the Lehigh University Alumni Association offers so many oppor-

tunities and benefits: Alumni Weekend and Reunion, Sendoffs, Homecoming and Family Weekend, regional club outings, and virtual Mountain Talk lectures and alumni career webinars. We’re adding new alumni affinity groups, with access to alumni networks connected with entrepreneurship, accounting and the health care industry. And we have plenty of other ways you can volunteer, network and stay connected.

Take advantage of all we have to offer at mylehigh.lehigh.edu. And while you’re there, I would be remiss if I didn’t encourage you to show your support for Lehigh with a meaningful gift before the end of our fiscal year on June 30 (just go to give.lu/spirit). You can support the university as a whole or a program of your choice, and even make your gift in honor or memory of someone special to you.

Thank you for your support and for keeping the Lehigh spirit alive!

Sincerely,

Robert W. Wolfenden, *Assistant Vice President for Alumni Relations*

YEVGENIY “GENE” TKACHENKO left his home in Ukraine in 1990, at the onset of the breakup of the Soviet Union, and went on to play a role in another momentous transformation—the birth of the wireless communication industry.

“When I came to Lehigh,” says Tkachenko, “I had absolutely no clue what to expect. I didn’t even know if I should bring a coat. But I did know it was a huge opportunity.”

Tkachenko arrived at Lehigh as part of the U.S.-Soviet Exchange Initiative endorsed by Presidents Ronald Reagan and Mikhail Gorbachev. He earned three degrees in electrical engineering and has used his knowledge of semiconductors to build computer chips for cell phones around the world.

“It’s great to have had the opportunity to develop technologies for Motorola, Nokia, iPhones and GalaxyS,” says Tkachenko. “They make our lives so much fuller and safer, and more interesting and dynamic than they were two decades ago.

“We can truly call what has happened in the last 20 years a wireless revolution,” he says, noting that some areas of the developing world that lack Internet access or other wired connectivity do have cell phones.

“If something happens in a remote village, the next minute it appears all over the globe. Mobile devices are empowering people and political groups to spread their messages.

“Wireless communication is making the world more free and democratic.”

In 1995, Tkachenko joined Alpha Industries, a Massachusetts maker of communications chips, where he focused on military and space wireless applications. Alpha later merged into Skyworks Solutions Inc., the largest provider of semiconductors for mobile telephones in the U.S., and Tkachenko became senior director of engineering.

“We went from producing hundreds of thousands of wireless devices a year to building several million a day. Some of these were very complex multichip modules integrating many different semiconductor devices and technologies within footprints of a few square millimeters.”

Tkachenko recently left Skyworks to become executive vice president for the handset business at Eta Devices, an MIT spinoff that makes semiconductor chips. “At Eta,” he says, “we have a technology that promises to revolutionize the next generation of mobile and wireless infrastructure devices from the standpoint of efficiency and power.”

He credits much of his success to his Lehigh education, especially Prof. James Hwang, his adviser.

“Lehigh provided me the opportunity to work on real-life problems with commercial companies. This, in my view, is what differentiates the U.S. university system in general, and Lehigh in particular, and it is why the U.S. has such a competitive advantage globally.”



In Lehigh, Tkachenko found a home away from home. “I met some very special people here. Plus, my wife, Lena, and I had our daughter while I was at Lehigh, so we have sweet memories of the place.”

The revolution in wireless communication, he says, is just getting started. “We’ve only reached the tip of the iceberg.” Coming soon: wireless phablets (a cross between a phone and a tablet) that do everything from making credit card purchases to starting your car to testing your blood sugar.

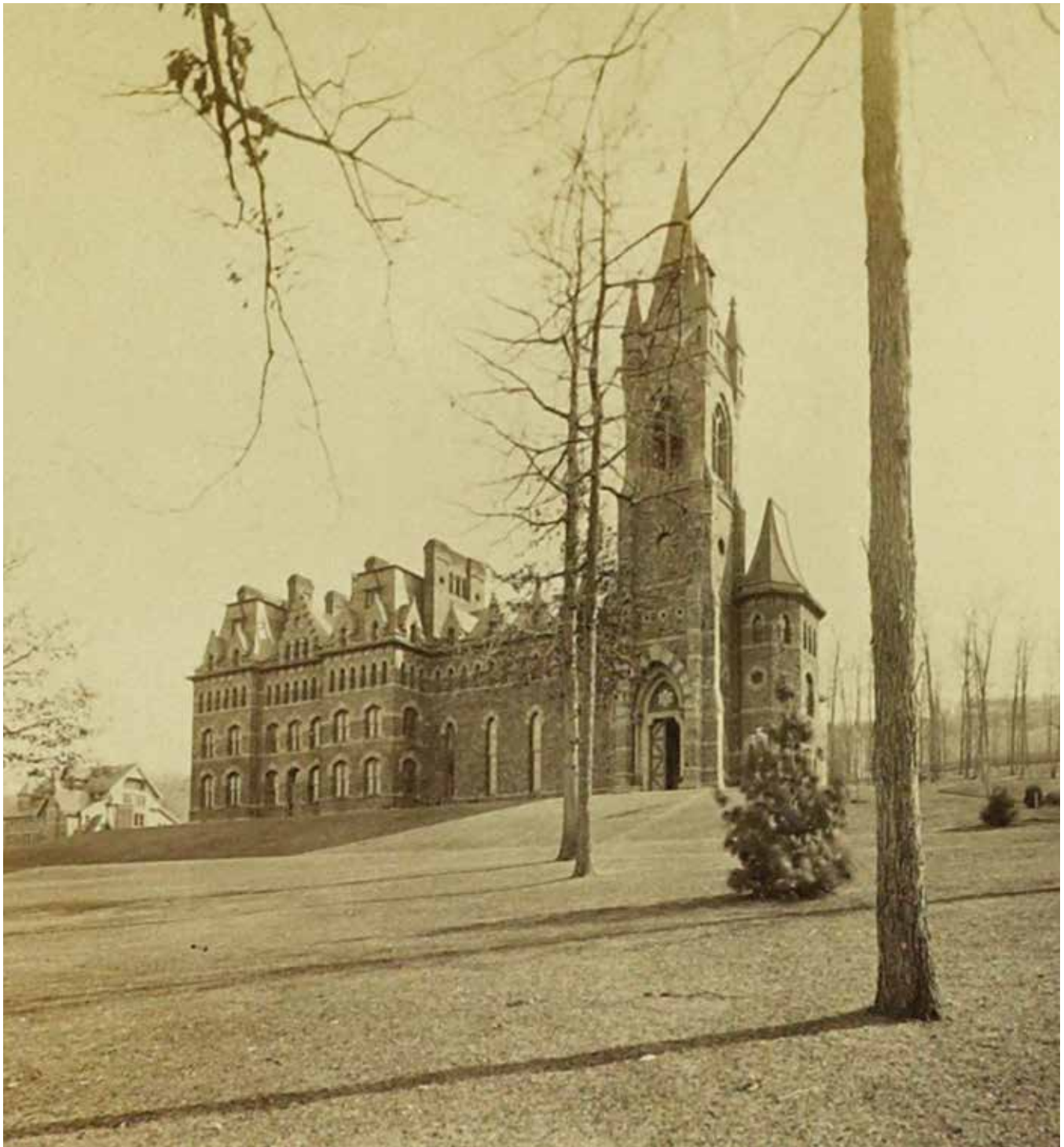
“Lives will be saved because doctors will have wireless access to whatever is happening to a person’s body at any point in time,” he says.

“I’m so blessed to have been able to work on these things; it’s been the chance of a lifetime.”

—Elizabeth Shimer Bowers

JUST STARTING

Tkachenko, executive VP for Eta Devices’ handset business, says the revolution in wireless communication has just begun. The opportunity to work on real-world problems at Lehigh, he says, gave him a competitive advantage.



UNIVERSITY ARCHIVES

THE HEART OF IT ALL: It is without question the most iconic building on campus. Packer Hall, shown here shortly after its opening and otherwise known as the University Center, was built in 1886 and has since stood at the center of Lehigh's campus. The building originally was home to a chapel, classrooms, offices and dormitory space, and during construction a railway line was built specifically to carry materials to the building site. Today, the building is home to various dining facilities, a bank, conference rooms and numerous offices, including dean's offices and various student-support departments.

NOSTALGIA: The Greatness of The Goose



THERE'S NO GETTING AROUND IT: "The Goose" is simply part of Lehigh. For more than 30 years, the Goosey Gander Caterer and Deli has been dishing out its beloved sandwiches and deli delights, and in the course of those three-plus decades, the sand-

wich shop has evolved into something of an institution here on South Mountain. So, too, has cheerful owner Tony Silvoy, who can always be counted on to deliver his wonderful food with a friendly greeting and a broad smile. *Photos by Christa Neu*

Become a part of your Alumni Association



Attend an Event

From reunions to sports outings, educational sessions to social gatherings, your Alumni Association organizes hundreds of events a year across the country. Connect with Lehigh and other alumni—in person or online!

Join a Group

Affinity groups are created to bring together alumni with common interests. Network with those who share a similar profession, special interest, or student experience!

Advance Your Career

FREE resources, programs, and information help you to develop your career and professional network. Take advantage of these special opportunities offered through Alumni Career Solutions.

Volunteer

In collaboration with staff, volunteers contribute their talent, skills, leadership, and passion to advance the university's mission. Get involved and make a difference!

Connect with Lehigh online at alum.lu/mylehigh.



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During a photo shoot at the Goodman Campus in March, Lehigh softball stars Emily Brusher '15 (left) and Morgan Decker '16 showed off their skills—and shared a laugh or two as well (see story, pg. 24). Photo by Steve Boyle

